

THE ARCHITECTURAL RECORD

Published Monthly by F. W. DODGE CORPORATION, 115-119 W. 40th St., New York
Truman S. Morgan, *President* Sanford D. Stockton, Jr., *Secretary* Howard J. Barringer, *Treasurer*

VOLUME 63

JUNE, 1928

NUMBER 6

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Contributing Editors: F. Chouteau Brown, Glenn Brown, Herbert Croly, Henry-Russell Hitchcock, Jr., Fiske Kimball, A. N. Rebori, Leon V. Solon

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Yearly Subscription: United States, Insular Possessions and Cuba, \$3.00; Canada, \$3.60; Foreign, \$4.00. Single Copy, 35c. Member, AUDIT BUREAU OF CIRCULATIONS and ASSOCIATED BUSINESS PAPERS, INC. Copyright, 1928, by F. W. DODGE CORPORATION. All rights reserved.

Entered as second class matter May 22, 1902, at the Post Office at New York, N. Y., under the Act of March 3, 1879. Printed in U. S. A.



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Water, being volatile—that is, having a tendency to evaporate—entirely vanishes from any substance unless a chemical inter-action holds some part of the water permanently. Cement does this. However, this additional fact is to be observed, an ounce of dry cement plus an ounce of water does not result in a two-ounce solid. Why?

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R. A. Plumb
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ARCHITECTS' ANNOUNCEMENTS

ANNOUNCEMENT is made that the office of Louis H. Rush, architect, 1520 Locust Street, Philadelphia, Pa., has been closed indefinitely.

WARNE, TUCKER, SILLING & HUTCHISON, architects, Charleston, W. Va., are revising their files in accordance with A. I. A. document No. 172, and would be pleased to receive manufacturers' samples.

WILLIAM WESTERFIELD HAVENS, architect, builder, engineer, announces the removal of his office from 227 East 178th Street, to 400 East Tremont Avenue, Bronx, New York City.

CHAS. M. LOBEJAGER, R.A., architect, announces that he transferred his office from 102-46th Street, Corona, L. I., to his residence at 1801-147th Street, Whitestone, L. I. and will there continue the practice of architecture and building operations throughout the City of New York. He has also opened an office at 50 Glen St., Glen Cove, Nassau Co., L. I.

ROWE, DILLARD & ROWE, architects, announce the removal of their offices to Suite 1916, Engineering Building, 205 West Wacker Drive, Chicago, Illinois.

FULLER & STICKLE, architects, announce that they have dissolved partnership. Mr. Fuller will stay in the present office 721 Commerce Building, Erie, Pa., and Mr. Stickle has moved to 227-28 Commerce Building, Erie, Pa. Both request manufacturers' samples.

W. WARD WILLIAMS, registered architect, announces the removal of his office to Suite No. 712-713, Fitzsimons Building, 331 Fourth Avenue, Pittsburgh, Pa.

WILLIAM REICHERT, formerly a member of the firm of Ottenheimer, Stern & Reichert, and Sidney C. Finck, formerly associated with the same firm, announce the formation of a partnership for the practice of architecture. The new firm of Reichert & Finck has its offices at 35 South Dearborn Street, Chicago.

GEORGE C. NIMMONS & COMPANY, architects, announce the removal of their offices to 333 North Michigan Avenue, Chicago, Ill., and the change of the firm name to Nimmons, Carr & Wright to include George Wallace Carr and Clark C. Wright who have been associated with the firm as partners for the last eleven years.

JOSEPH A. GRAFT, architect and engineer, has established his office for the practice of architecture and engineering at Box 764, Pittsburgh, Pa., and would appreciate receiving manufacturers' samples.

RUDOLPH P. MILLER, consulting engineer, announces the removal of his offices to The Architects' Building, 101 Park Avenue, New York City.

LEON E. STANHOPE, architect, announces removal of his office to the Thirty-First Floor, Pittsfield Building, 55 East Washington Street, Chicago, Illinois.

HARRY M. HASKELL and LEO E. CONSIDINE, architects, have formed a partnership under the firm name of Haskell and Considine, with offices at 612-620 Hulett Building, Elmira, New York.

EDWIN S. RICHARDS, JR., and MANFRED MANCUSI-UNGARO have formed a partnership operating as Richards & Mancusi-Ungaro, architects, in the Federal Trust Building, 24 Commerce Street, Newark, N. J.

PRESTON J. BRADSHAW, architect, has moved to larger quarters at 718 Locust Street, St. Louis, Mo.

WILLIAM TEMPLETON JOHNSON, A.I.A., architect, announces the removal of his offices from 502 Electric Building to 1400 San Diego Trust and Savings Building, San Diego, Calif.

RAYMOND G. CLIFFORD, architect, has moved from the Gerlinger Building to 616 Guaranty Building, Portland, Oregon.

HAROLD O. SEXSMITH and WALTER W. WADE announce the formation of a partnership for the general practice of architecture, under the firm name of Sexsmith and Wade, architect and engineer, 6513 Hollywood Boulevard, Rooms 209-210, Hollywood, Calif.

THE OFFICE OF HOLABIRD & ROCHE, architects, has been moved from Room 1400, 104 South Michigan Ave., to Room 900, 333 North Michigan Ave., Chicago, Ill.

PARTNERSHIP in the architectural firm of Denham, Van Keuren & Denham has been dissolved. The practice of architecture will be continued by E. B. Van Keuren, Inc., at 407 Comer Bldg., (formerly Age Herald Building) 2nd Ave. & 21st St., Birmingham, Ala.

CHARLES ANDERSON, architect, has moved from 171 Madison Ave., to 420 Lexington Ave., New York City.

WILLIAM L. MARGRAFF, architect, has opened an office at 228 No. La Salle Street, Chicago, Ill.

CHAS W. VALENTINE, architect, has moved from 445 Milwaukee St., to 373 Broadway, Milwaukee, Wis.

D. W. B. HAINING, architect, has moved from 225 Guarantee Trade Bldg., Atlantic City, N. J., to 206-7 Sheen Bldg., 1536 Atlantic Ave., Philadelphia, Pa.

BERENSON & MOSES, architects, formerly of 30 Allyn Street, have moved to 252 Asylum Street, Hartford, Conn.

CARL E. MOORE, architect, is now located at 345 Grant Street. Old address: 117 W. 5th Ave., Gary, Ind.

ED. G. HOEFLE, architect, 728 Keith Bldg., East 17th & Euclid, Cleveland, Ohio, formerly of Best & Hoefler, 838 Keith Bldg., requests manufacturers' samples.

A. P. COOLIDGE, architect, has moved to 229 Cherry Street from Interstate Bank Bldg., Helena, Arkansas.

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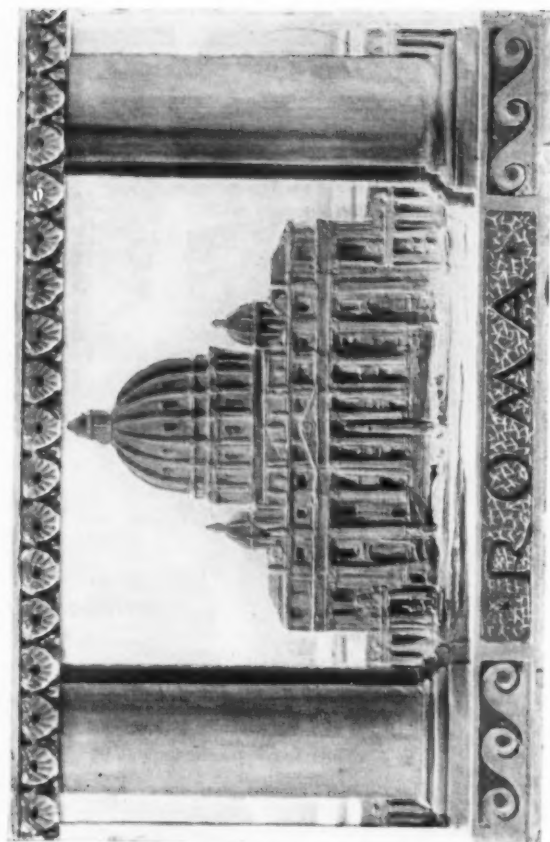
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The three panels in polychrome terra cotta shown on the reverse side were designed by Messrs. Dennison & Hiron, Architects, to adorn the façade of the new building of the Beaux-Arts Institute of Design, 304-306 East Forty-fourth Street, New York City. They represent the three great seats of learning in the arts of Architecture, Sculpture, Painting—Athens, Rome, Paris.

The architectural setting for the panels is shown on pages 498, 499 and 502 of the current issue of the magazine.



Polychrome Terra Cotta panels
for the façade of the new building
of the Beaux-Arts Institute
of Design, New York City.



DENNISON & HIRONS, Architects
RENE CHAMBELLAN, Sculptor
These studies were made from
plaster models with applied color.

THE ARCHITECTURAL RECORD

AN ILLUSTRATED MONTHLY MAGAZINE OF
ARCHITECTURE & THE ALLIED
ARTS & CRAFTS



VOLUME 63

JUNE 1928

NUMBER 6

THE NEW BUILDING OF THE BEAUX-ARTS INSTITUTE OF DESIGN

DENNISON & HIRONS, ARCHITECTS

BY PHILIP L. GOODWIN

IN THE last three years the architectural work particularly, and the departments of Sculpture and Mural Painting, have increased so greatly that the old building of the Beaux-Arts Institute of Design, at 126 East 75th Street, has been crowded beyond its capacity. This building was formerly the private stable of Mr. Jacob Schiff and was bought by Lloyd Warren in 1914 and occupied by the Institute in the following year. It served the purpose excellently until a few years after the war, when the expansion of the work of the Beaux-Arts began to take on extraordinary proportions. The old building became thoroughly unsatisfactory practically overnight, both as regards space for exhibitions, for the ornamental sculpture class and the life class, and particularly for the administration of the Institute. It was also threatened with complete submersion by two large apartment houses. All this would not have been sufficient reason to move out had it not been for the position of the school. It is so definitely on the East Side and quite a distance from the Forty-second street

centre, or even the Fifty-ninth street centre, that it did not seem likely to be other than out of the way for many years to come.

The committee in search of a new site decided that the Forty-second street centre was the best one. As we could not afford to get plenty of space and still be very close to Grand Central Station, a site was found on high ground, directly adjoining Tudor City within two blocks of Forty-second Street and looking directly up to the Graybar Building. It is at this site, 304 and 306 East Forty-fourth Street, that the new Beaux-Arts Building is about to rise.

The competition for the new building, which was held last November, was won by Frederic C. Hirons with a very simple, very architectural and very appropriate design; it has been slightly modified but contains the original characteristics of the sketch. The building consists of a high basement, which includes the gallery of the exhibition hall, three floors and a setback apartment on the roof. There has been great discussion as to the material to be used. It would have been fine to have

stone or marble, but quite out of the question on account of the cost. Space and facilities were absolutely necessary and the whole plan has been very largely based on utilitarian considerations. Beside good proportions, however, it would seem suitable to have something to differentiate this building from the loft building, for if the architects themselves do not care enough about beauty to make some slight sacrifice for it, how can they induce other people to do so? It is hoped that some day the two pieces of sculpture may be carved, although they will appear only as rough blocks to begin with. The statues shown on the design are also things of the future. Maybe some good friends of the Institute will take enough interest to present these and, at the same time, provide some commissions for sculptors.

The basement, beside the boiler room and machinery room, has a large storage space for old drawings and scenery for the Beaux-Arts Ball, etc. A large, well ventilated dining room adjoins the kitchen. There is also here a place for the sculptors' clay. The first floor has enough additional office space to take care of present requirements, with some expansion. It is well adjusted for modern metal filing cabinets and space saving devices of various kinds. The small vestibule gives another opportunity for decorative treatment by

mural decorations, provided special funds for this purpose are forthcoming. This and the façade are the only portions that furnish the slightest architectural opportunities. The vestibule leads into a large exhibition hall, sixty-five feet by forty-eight feet, with a wide gallery around it which can be used for the loges for the Paris Prize when they are needed, and for ordinary exhibition space at other times. At the back is

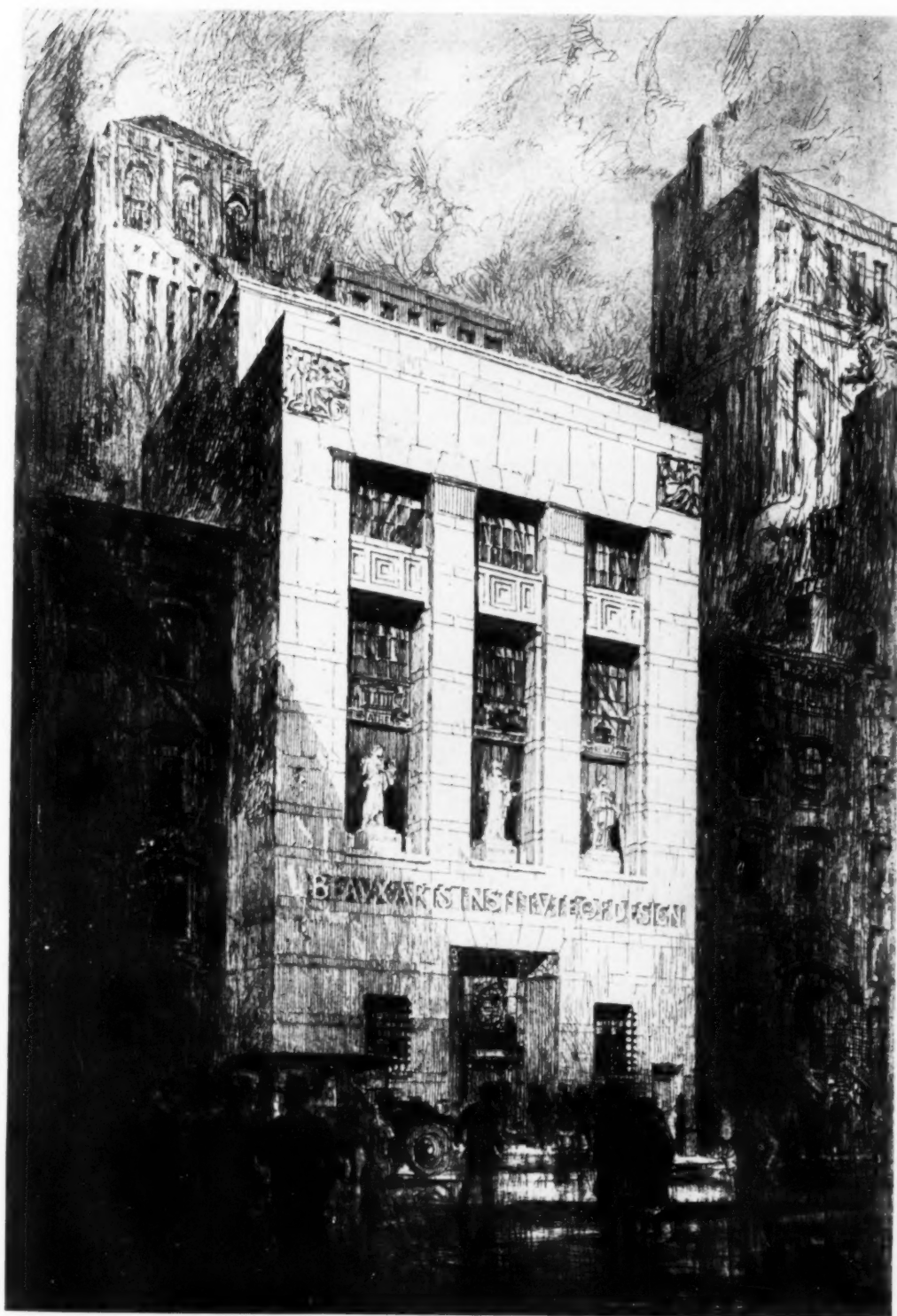
more space available for future office expansion. Trap-doors are placed in the floor for letting the drawings down to the storage space below. Plain painted brick or plaster walls and unfinished ceilings prevail throughout.

The second floor has additional exhibition floor space which may not be required at first, but at the present rate of expansion will surely be needed before long! There is also a library on this floor for which the Carnegie Foundation has provided a fund. The whole exhibition space amounts to something like two and a half times what we now have. The third floor is simply a

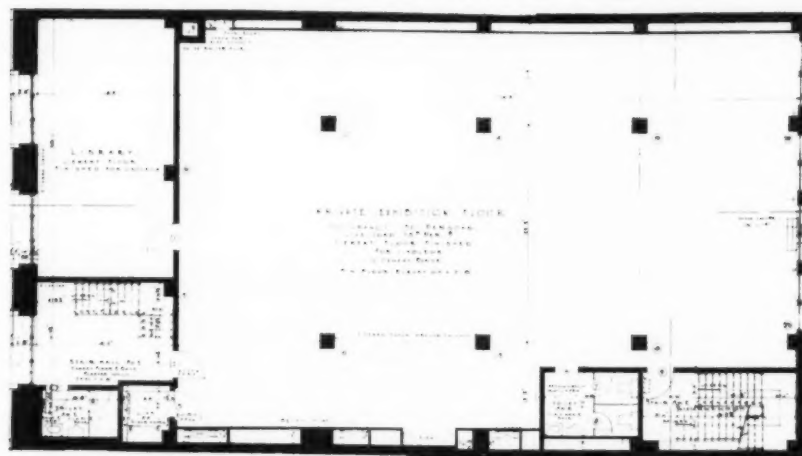
loft floor, entirely open, devoted to the ornamental sculpture class and an office for the resident executive secretary, Mr. Clarke. The fourth floor is exactly like the third floor and is given up to the life class and the secretary's studio. The top floor is partly covered by Mr. Clarke's apartment; this has a set-back forming a balcony on



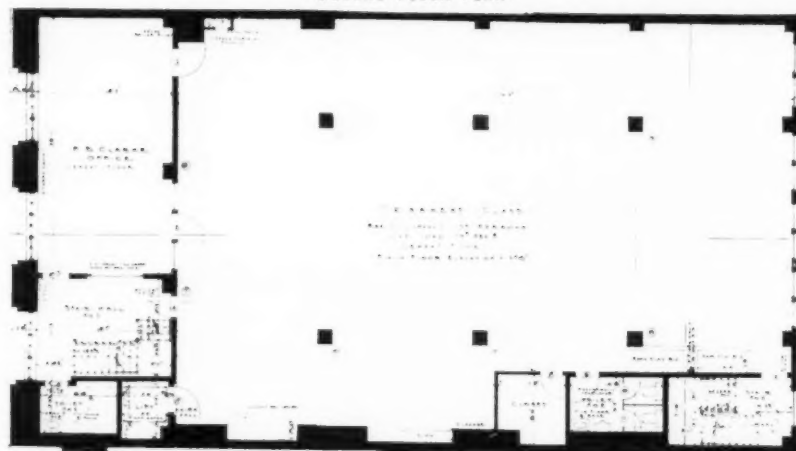
MODEL OF THE NEW BUILDING OF THE BEAUX-ARTS INSTITUTE OF DESIGN



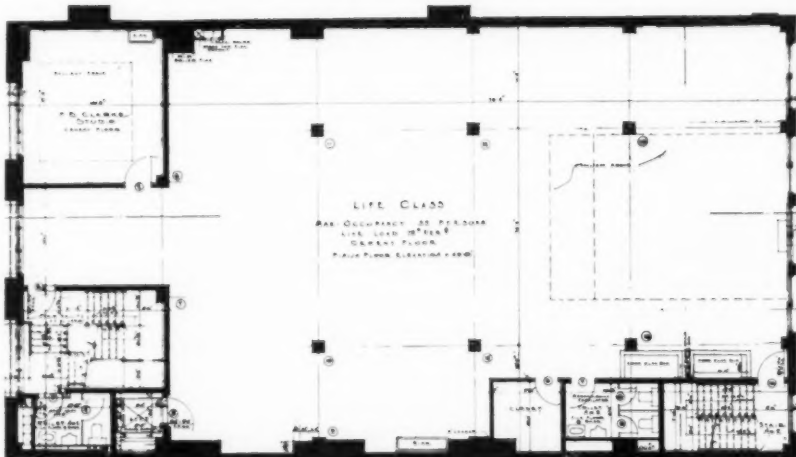
PERSPECTIVE DRAWING OF THE NEW BUILDING
BEAUX-ARTS INSTITUTE OF DESIGN, NEW YORK
DENNISON & HIRONS, ARCHITECTS



SECOND FLOOR PLAN



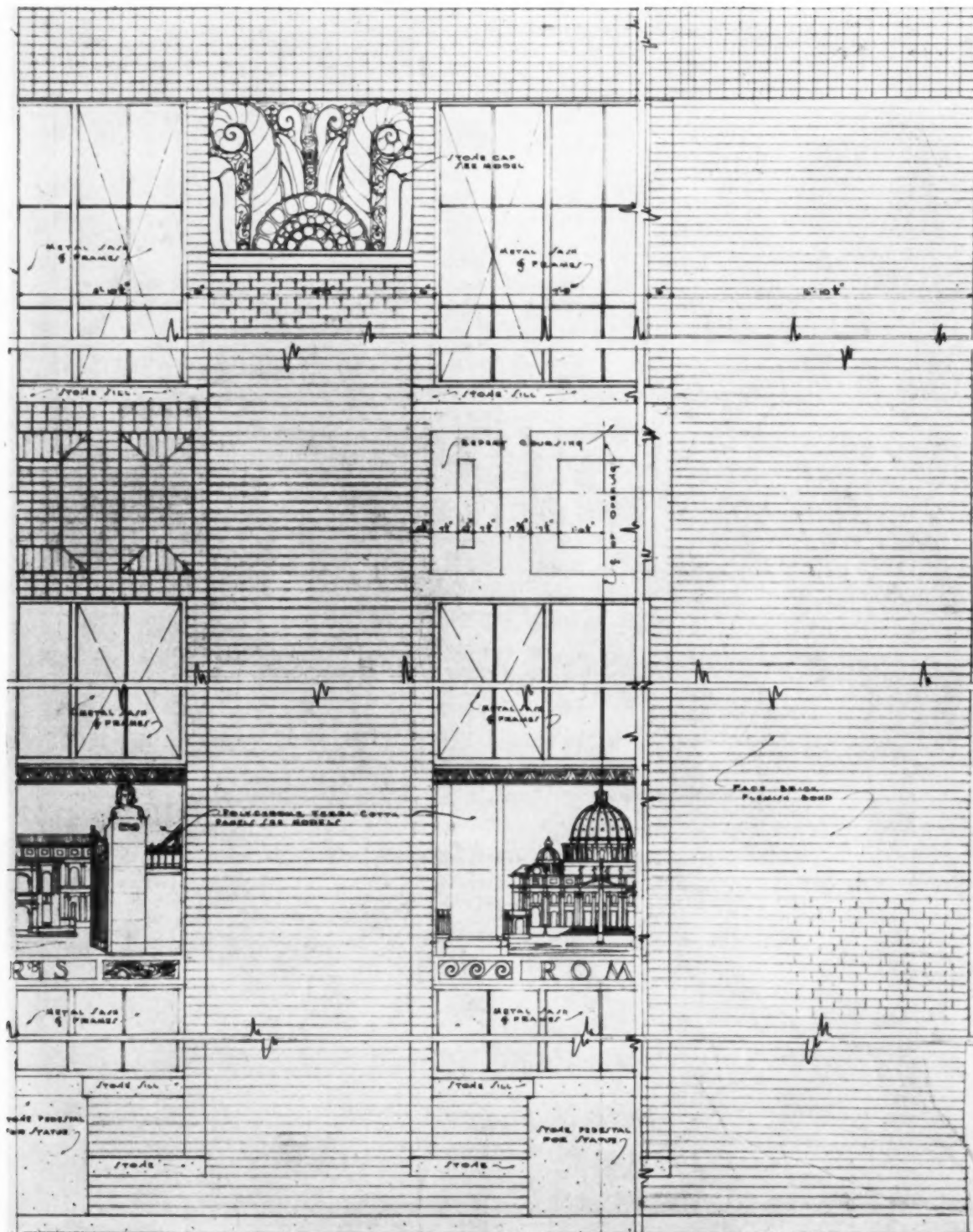
THIRD FLOOR PLAN



FOURTH FLOOR PLAN

NEW BUILDING OF THE BEAUX-ARTS INSTITUTE OF DESIGN,
NEW YORK

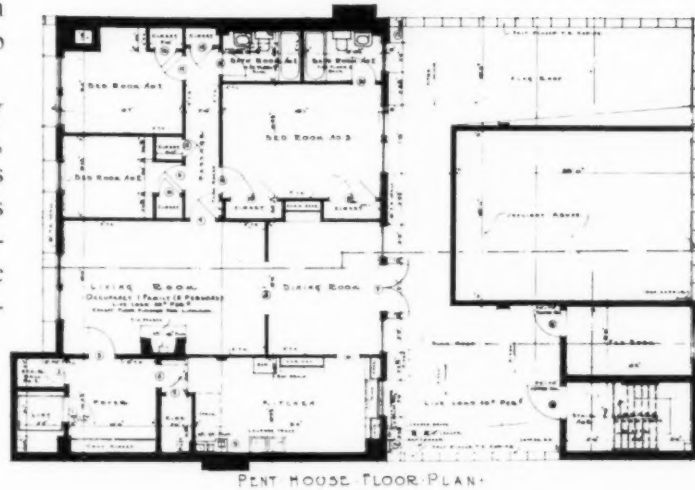
DENNISON & HIRONS, ARCHITECTS



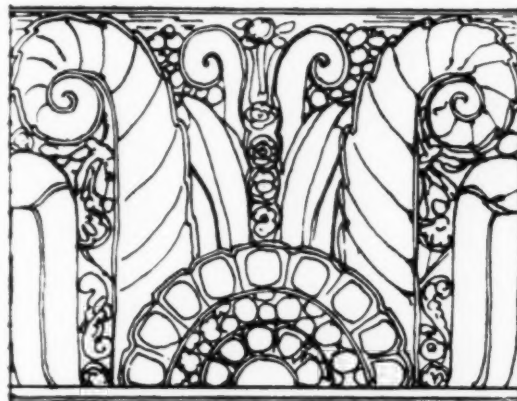
WORKING DRAWING SHOWING FAÇADE DETAIL
 NEW BUILDING OF THE BEAUX-ARTS INSTITUTE OF DESIGN,
 NEW YORK
 DENNISON & HIRONS, ARCHITECTS

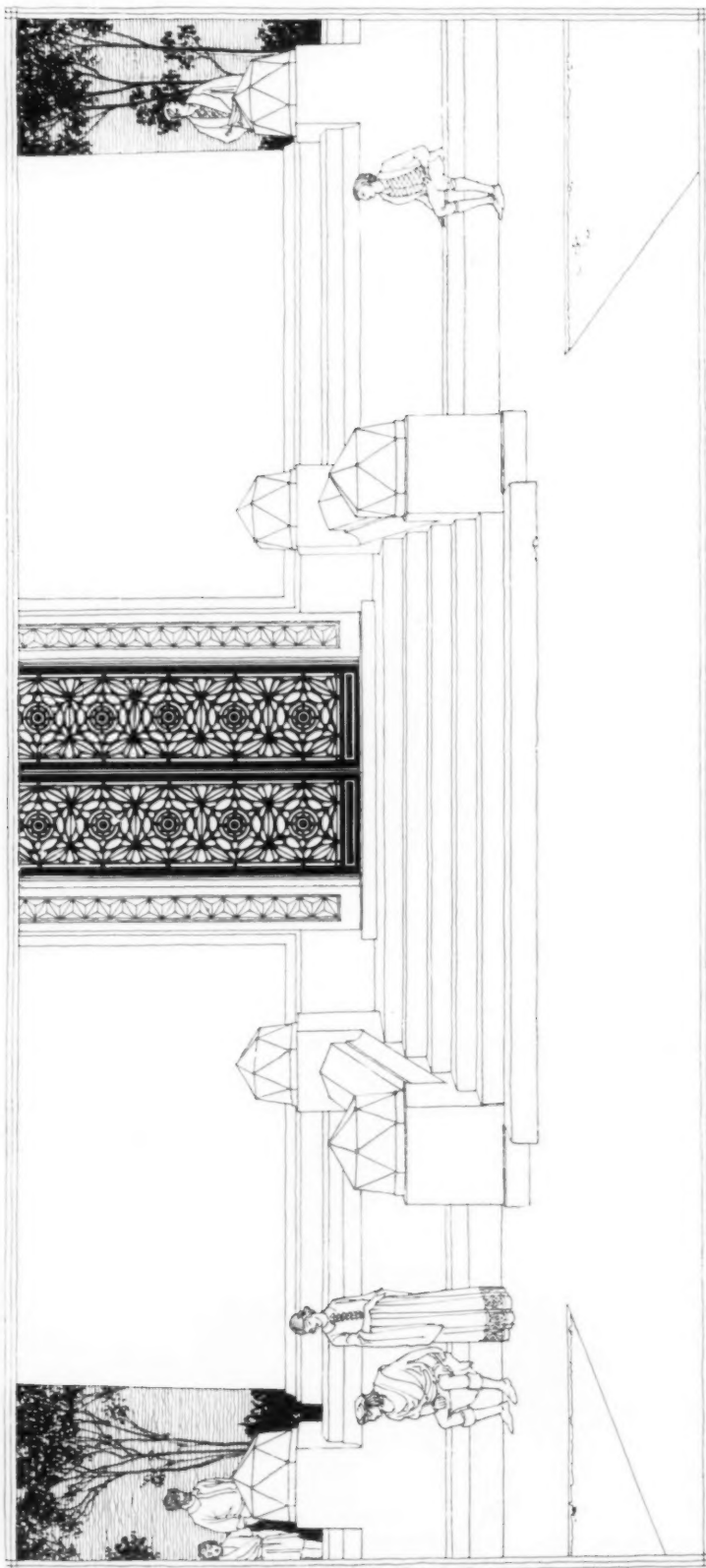
the front and a sort of roof garden at the rear, where it is not taken up by skylights.

The new building will be amply provided with plumbing facilities, fireproof staircases and as much glass area as is possible. These are things that were conspicuous by their scarcity in the old building. It will be entirely fireproof as well. In embarking on the new building it has been a difficult question to foresee the future. At present the Institute forms a clearing house for a very large number of architectural schools all over the United States. The number of drawings that pour in for each judgment is so large that not only has it exhausted the physical space of the old building, but almost the powers of the juries. Time alone can show whether the work will continue to expand or whether some new solution will be necessary to make the judgments better still, in order to maintain the high standard—the highest in the country—which has existed in the past. Although it



is not an agreeable occupation to all, and perhaps not one in which architects excel, members of the Beaux-Arts Society and Institute should actively try to spread information on the work going on here. The public is inclined to think of the place exclusively as one that has a Grand Ball once a year. Until it is more fully informed of the great and useful work that is being done, they will not give the Institute as much support as it needs and deserves.





ENTRANCE TO A MAUSOLEUM—ORNAMENT DERIVED FROM THE PLATONIC SOLIDS: THE TETRAHEDRON AND ICOSAEDRON

FIG. 7

ORNAMENT FROM THE PLATONIC SOLIDS

BY CLAUDE BRAGDON

WHEN I delivered to the editor of The Architectural Record the manuscript and drawings for my second essay on "Ornament from Magic Squares" with the bright assurance that there would certainly be more to follow, despite his unfailing hospitality to these children of my brain, some vision of the Infinite may have for the moment daunted him, or perhaps it was only a glimpse of the ghost which haunts all editors, the Average Subscriber. Anyway, he suggested that by way of variety I should write an article on a subject of great moment to the architectural profession, because so deeply involved with the future development of the art itself. I was asked to discuss those modifications of form and design which a building undergoes—or should undergo—by reason of the use of this or that material, or the employment of one or another structural method. I was to consider the architectural art not as an array of passing fashions, but as the expression, in terms of form, of varying functions.

This seemed an excellent idea, and I set to work on it at once; but presently something happened—the sort of thing that at one time or another grips every sincere artist and gives him the reputation of being "temperamental." I found that instead of writing, as I intended, about architecture as a revelation of the qualities of various materials and as a dramatization of structure, I was "still harping on my daughter"—still discussing the mathematics of the arts of design. I am reminded of a story told by E. S. Willard, the actor. He had made such a success in "The Professor's Love Story" that he engaged Barrie, the author, to write for him another play, and they were in the habit of meeting often to talk it over. The first act went very well, but after a time

Willard noticed that he saw less and less of Barrie, and that when they did meet he was constrained and embarrassed. When called to account for this, Barrie said, "Well you see this isn't your play at all, Willard, it's turning out to be a woman's play, and I can't seem to help it either," and their negotiations came to an end.

More thrifty than Barrie, I shall try to give the editor something at least of what he has asked for, and at the same time advance the discussion of mathematics as a source of design; accomplishing this dual purpose by developing fresh ornamental motifs through new devices, and then showing what modifications these would naturally undergo when interpreted in terms of different materials.

The reasons for undertaking this quest for a new ornamental mode, and for the belief that it is to be found in mathematics, are doubtless by now familiar to the reader and need not be repeated for the third time. Abandoning for the time being research along the line of magic square formations, let us go prospecting elsewhere. The reason why I so reiterantly employ this figure is because in this quest we are indeed *miners*, not searchers after already minted money worn by use and stamped with the heads of ancient emperors, but prospectors for that virgin gold which must be extracted from the hard rock of mathematics with labor of the mind, refined by the creative imagination, and then shaped into forms of beauty sufficiently compelling to woo all misguided seekers after pirates' gold into these same delectable mountains where are King Solomon's mines, let us call them, since their riches yield only to the courageous and the wise.

Now what every miner wants to find first and above all is the mother lode—the par-

THE "DICE OF THE GODS": PLATONIC SOLIDS
THERE ARE BUT FIVE REGULAR POLYHEDRONS—THESE ARE THE SO-CALLED PLATONIC SOLIDS



A SPHERE MAY ALWAYS BE INSCRIBED WITHIN AND MAY ALWAYS BE CIRCUMSCRIBED ABOUT A REGULAR POLYHEDRON. INNUMERABLE OTHER RELATIONS EXIST BETWEEN THE EDGES, THE RADII, THE SURFACE AND THE VOLUME OF EACH ONE OF THE PLATONIC BODIES

FIG. 1

ent source of all the gold uncovered by chance here and there. In our particular quest this would have its correspondence in the archetype, the form of all forms, the class of all classes. One of these archetypes, and the most inclusive and universal, is the logarithmic spiral, which is at the root of Best-Maugard's "Method of Creative Design" and of Jay Hambidge's "Dynamic Symmetry." In this essay I shall deal with certain others, more suited to my present purpose. These are the so-called five Platonic solids, the symmetrical polyhedrons of three dimensional space: the tetrahedron, the hexahedron, the octahedron, the dodecahedron and the

icosahedron, having respectively four, six, eight, twelve and twenty polygonal faces, as shown in illustration 1. Now, if to these we add the point at the beginning and the sphere at the end, we have a seven-fold series, archetypal in the same sense that Hambidge's "root rectangles" and Best-Maugard's "seven forms" derived from the spiral are archetypal, the generating figure of the Platonic solids being the sphere.

The unique, the "cosmic" character of these solids has been recognized from the most ancient times. Among the playthings of the infant Bacchus, each having its own symbolical significance, were "dice" in the form of the five Platonic solids, the implication being that upon these patterns all things in the universe are built, an idea curiously in accord with modern conceptions with regard to atomic disposition and molecular structure. Ancient Greek philosophers and modern theoretical physicists are alike in their belief that the mystery of the constitution of the universe is revealed nowhere so clearly as in number, and Plato is in singular accord with the atomists when he attributes the difference between

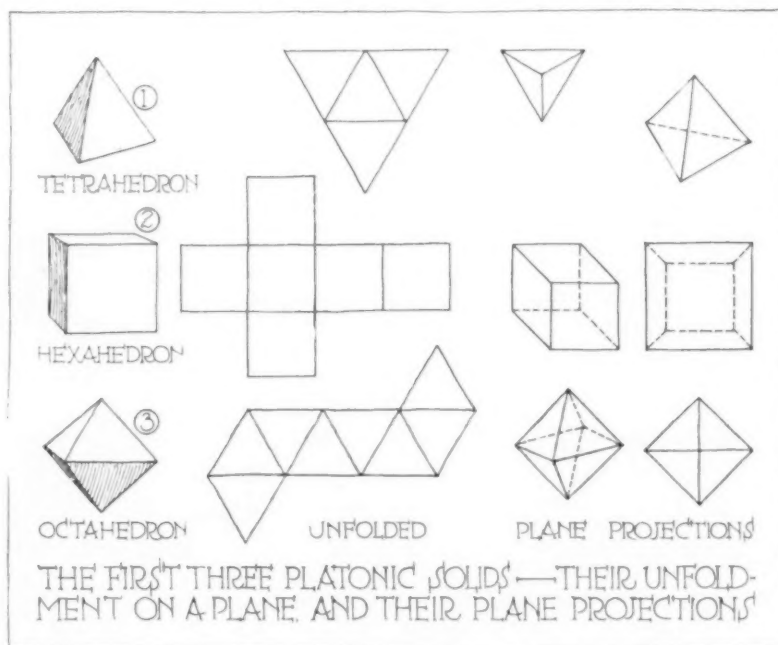


FIG. 2

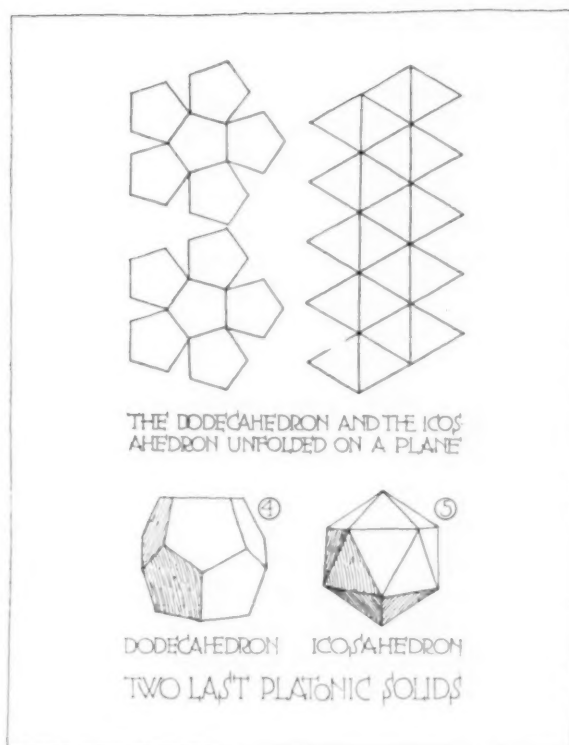


FIG. 3

the elements to differences in the arrangement of units in space.

Although Plato in his "Timaeus" is the earliest authority for the allocation "Platonic figures," it is to Pythagoras that Proclus attributes the discovery of their elements and proportions, while Theaetetus was the first to write at any length about the octahedron and icosahedron, as he was probably the first to construct all five theoretically and investigate fully their relations to one another and to their circumscribing spheres. Plato assigns the four solids to the four elements, earth, fire, air and water (the material principles, according to Empedocles, from which the universe was evolved), and the "vessel" in which they are all contained he conceives of as the sphere, which he identifies with the dodecahedron, approximating, as it does, the spherical form, and involving an element different from the other four, the regular pentagon.

These, then, by the testimony both of

ancient philosophy and of modern science are in the true sense archetypal, the "significant forms" of which we are in search. Let us therefore force them to yield the particular thing we seek. This should not be difficult, for Nature herself points out the way, having preëmpted these figures for her own pattern-making, along with the logarithmic spiral, the ovoid, and other generic forms, as even the most cursory study of botany and crystallography makes plain. Having discovered, for example, that the iris and the snowflake are both related to the icosahedron, we have only

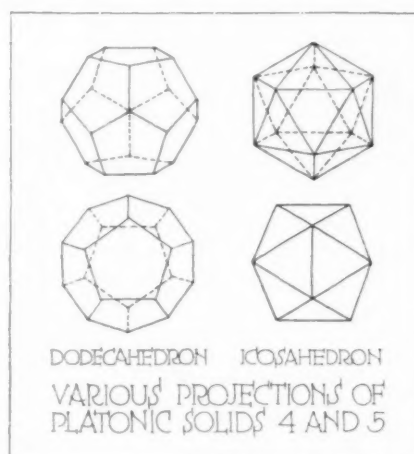


FIG. 4

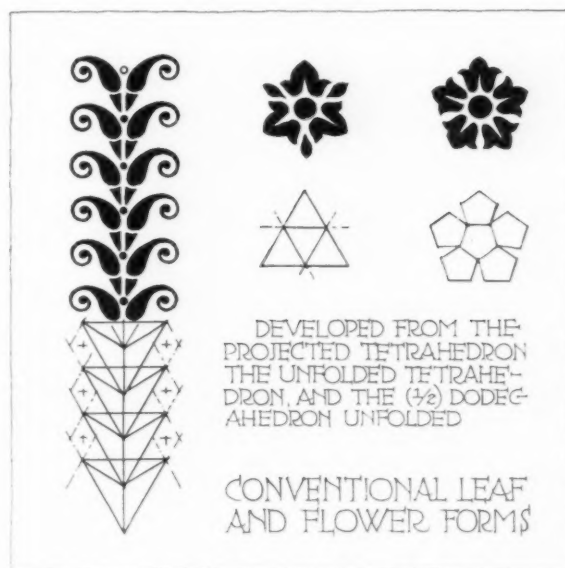
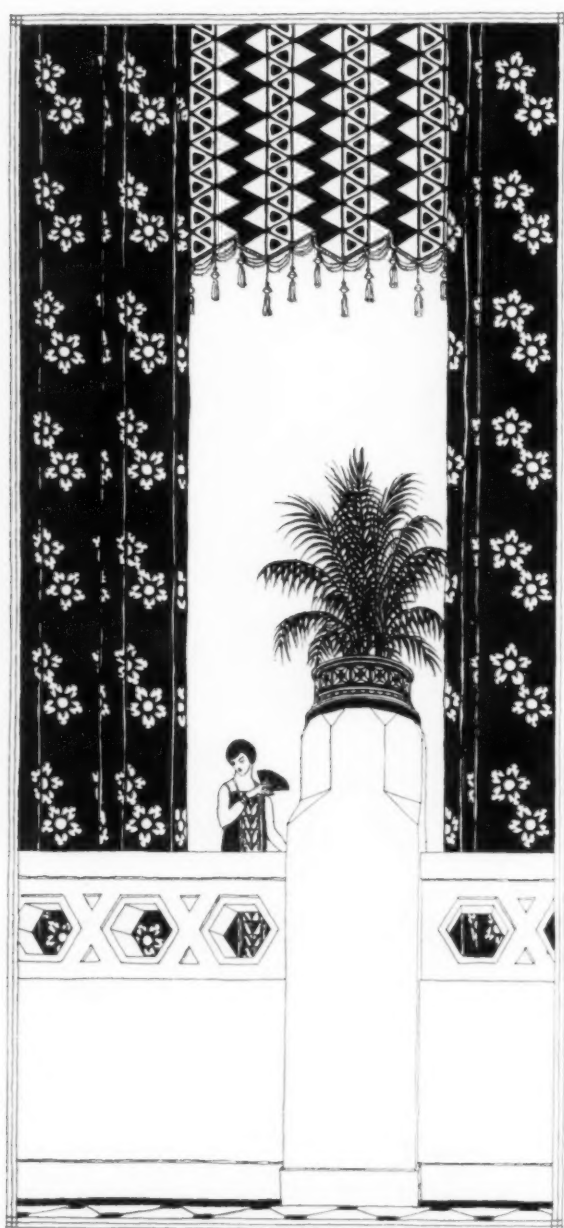


FIG. 5



MOTIFS "THE 4TH AND 5TH SOLIDS" UNFOLDED

FIG. 6

to follow Nature's method, not by blindly copying her patterns without insight or understanding, but making, with insight and understanding, new patterns of our own.

The first necessary thing is to become thoroughly familiar with the five forms under discussion, and the best way to do

this is to make models of them according to the familiar kindergarten method of cutting and folding, transforming them from plane figures into solids of three-dimensional space. It would be better still could we have models of them in glass, for then the far side would be visible as well as the near side, and the interesting and intricate relationships of lines could be studied by simply turning them about in one's hand. Lacking these glass models we shall be reduced to the study of their plane projections—the projections of the solids, that is—as *transparent* figures, for only by so considering them will we find the thing we seek.

Illustrations 2, 3 and 4 show, first, the five forms as opaque solids of three-dimensional space; second, the same "unfolded" in the two dimensions of a plane, and third, certain chosen aspects of the forms in plane projection, that portion of them contained in the hemisphere most distant from the eye being shown in dotted lines, thus indicating the effect of transparency.

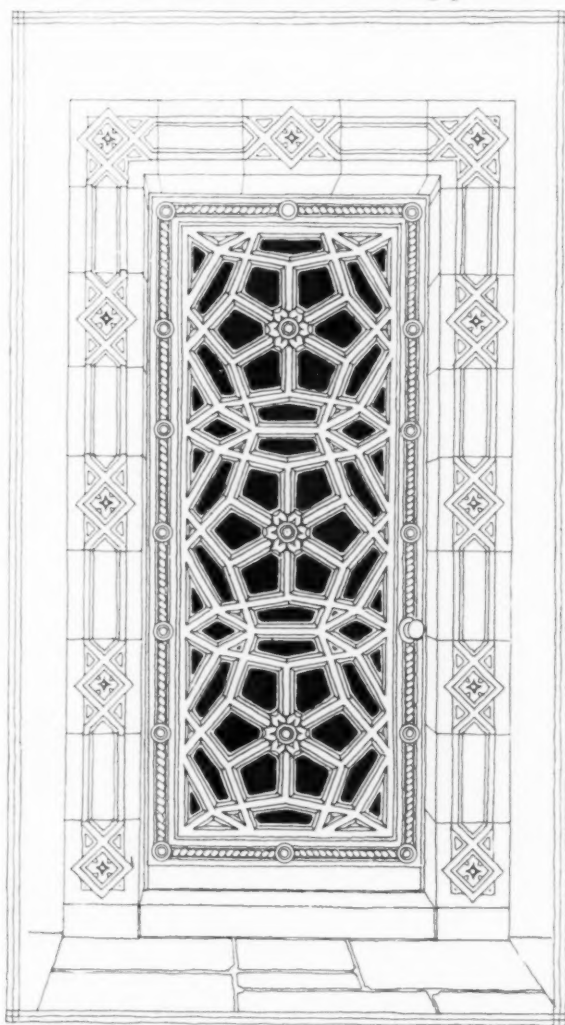
Now out of the material contained in these diagrams, if employed with skill and imagination, it is possible to construct many admirable patterns, the proof of which lies in the fact that throughout the remaining illustrations no other motifs for ornament have been introduced, and it would have been easy to multiply examples. The illustrations themselves give a sufficient indication of the method: the unfolded or projected figures representing the various polyhedrons yield a linear pattern which, employed either singly or in symmetrical repetition, is readily translated, with the aid of the aesthetic sense, into ornament. The mathematical framework is only the point of departure, so to speak: straight lines may be translated into curves, or the generating figure may be used only to determine the shape, size and disposition of ornamental motifs of an utterly different character, its reciprocal, as it were, in the same sense that the fleshly envelope is the

reciprocal of the skeleton, each cavity of the one answering to some protuberance of the other. Illustrations 6, 7, 8 and 11 represent a direct translation of the projected solids into essentially geometrical ornament, while in illustrations 5, 9, 12 and 13 the generating figure is only obscurely present, indistinguishable, indeed, though the determining factor of the design nevertheless.

The point I wish to make is the same I have tried to make in discussing magic squares: namely, that some forms are more *significant* than others, by reason of possessing certain interesting mathematical properties, and of illustrating certain mathematical truths. These the designer should search out and use, for by so doing he will snare, so to speak, a beauty transcending his personal power of evocation altogether. The particular manner in which he makes use of them his aesthetic intuition will determine, and his efforts will test out his powers as a navigator "on faery seas forlorn" no less surely than as though he set out sailless and rudderless. For these mathematical aids to design are indeed like sail and rudder, but captain and compass they are not—so save in the hands of a good navigator they are either useless or dangerous, and by a good navigator I mean one who knows at all times where he wants to go, and is able at all times to use the means at his disposal for getting there.

Approaching the subject of ornament now from a different angle, more in accordance with the suggestion of the editor—as affected, that is, by the material or medium employed—it should be stated again as at the beginning that this is a matter of much moment, and too little regarded by the architect. Housed of old in the same body, a gulf now separates the artist and the artizan. Not only are they twain, but often they neither see nor know one another and the mental processes of the designer are as much a mystery to the craftsman who executes the design, as the physical processes

he goes through are a mystery to the artist. This lack of understanding and coöperation is bad for both of them and its results are bad: some precious and vital quality has leaked out of the arts of space, they are too often either false or inexpressive. For one of the minor, though far from negligible, functions of the minor arts of space, as it is of the major art of architecture, is to show forth the *quality* of different materials—their strength, their delicacy, their native beauty of color and texture; they are put through their paces, so to speak, under the skilled directing hand of the artist-craftsman. In ancient times and among primitive



MOTIF, THE PROJECTED DODECAHEDRON

FIG. 8

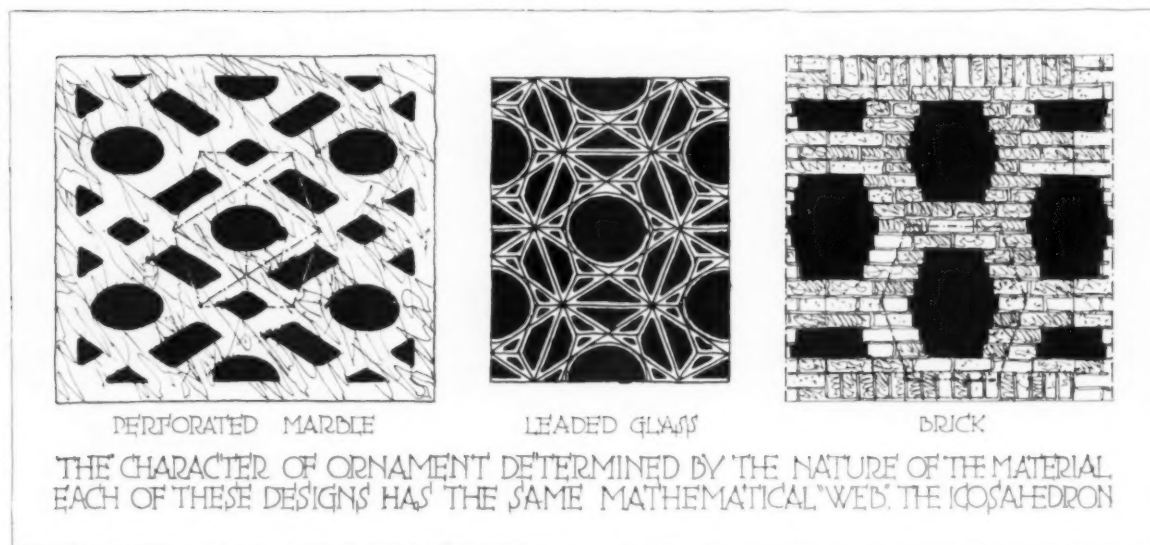


FIG. 9

peoples this particular function of art was fulfilled, as one might say, automatically, because the artizan was also the designer, and to him there was no way other than the right one. But to-day in civilized countries, by reason of a different consciousness and changed methods of production this canon of aesthetics is continually violated. Let me quote, in this connection, from one of my Scammon lectures, in which I assume the ungracious task of enumerating the shortcomings of the modern architect.

"The architect fails to think and work in terms of his materials."

"A proof of this failure is found in the

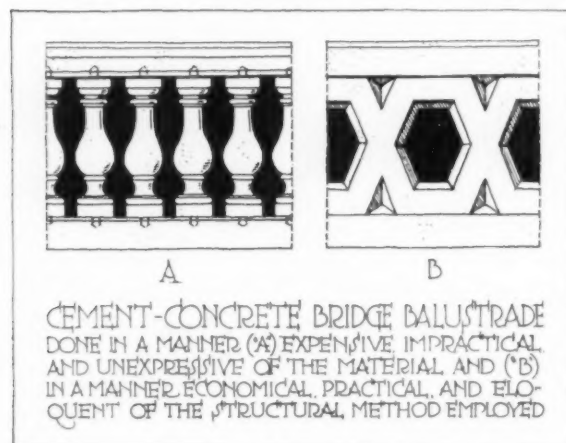


FIG. 10

common practice of substituting one material for another—wood for iron, terra-cotta for stone, stone for concrete, or vice versa—by reason of their difference in cost or to suit the whim of a client, without essential modifications in design. One of the most important functions of architecture is thus violated—the showing forth of the splendor and beauty (be it a beauty of strength or of fragility) of different materials, making the most of the unique characteristics of each.

"Now the beauty of terra-cotta, for example, is not less than that of stone, but it is different. Witness a Della Robbia lunette and a carved granite Egyptian bas-relief. Imagine the terra-cotta arcades of the Certosa of Pavia carved in stone. One would fairly ache at the thought of so much wasted labor, and feel a sort of terror at so great a weight so insufficiently supported. On the other hand, were the heavily rusticated street façade of the Pitti palace in Florence translated, without change, from stone to terra-cotta, the result would be no less distressing. There would be no charm of detail and texture to compensate for the splendid ponderosity of stone."*

*Six lectures on Architecture, p. 125, 126. University of Chicago Press, 1917.

Yet today one of the most common practices in the building trades, fostered and sponsored by architects, is the imitation of one material by another—sheet-metal mahogany doors, rock-faced cement blocks, linoleum encaustic tile and all the rest. This practice is not defensible unless lying is defensible, and I can think of no argument to justify it unless it be the negative one that these are deceptions by which nobody is deceived—like fibbing for the sake of being polite. Of course meretriciousness of this order is attractive to the type of mind to whom plated ware and imitation gems are attractive, but it is one of those things which now pettifies and vulgarizes the noblest of all the arts of space.

In order to illustrate the sort of thing to which I have reference, let us consider only this one example, because it is so typical: the imitation of stone forms in cement-concrete. We can still sometimes afford to build our buildings of stone, but not our

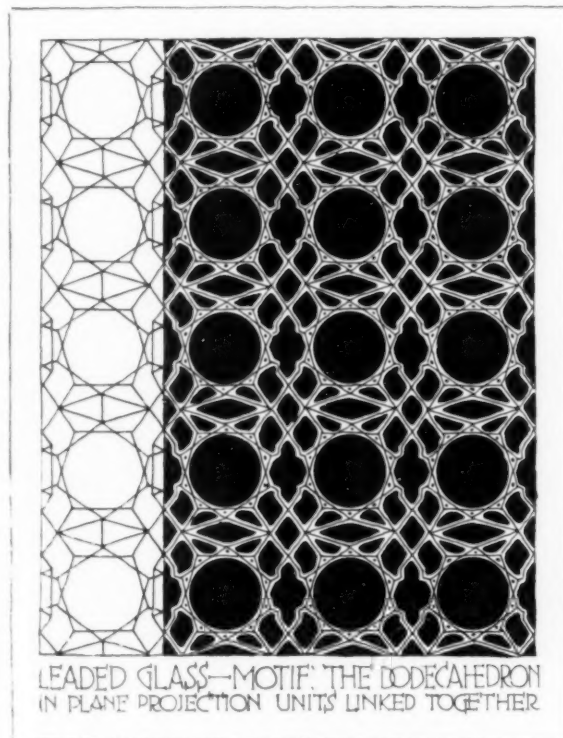


FIG. 11

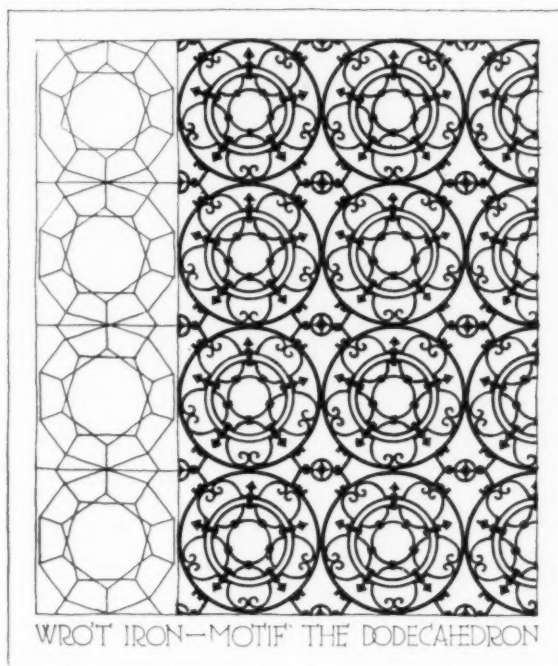


FIG. 12

bridges, and the necessity of making the bridge balustrade of cement-concrete is therefore usually imposed. How is this necessity met? Up to now, in the vast majority of cases by making a continuous solid paling with no slightest pretense to aesthetic interest, or by imitating the conventional stone balustrade with its mouldings and balusters—impractical, difficult, and expensive to make, each one separately doveled—totally false to the character of the material. For unlike stone, the nature of concrete is monolithic: it is poured in forms, which are removed after the cement has hardened. Simple shapes, flat surfaces, straight lines, the general absence of mouldings, particularly those with minute curves or reentrant angles—forms with these characteristics are easiest and cheapest to make and therefore most characteristic of the material. In illustration 10, "B" shows a bridge balustrade designed according to this general formula, for which any carpenter could make the forms, in contrast to "A," which would cost a great deal more and require an altogether different order of

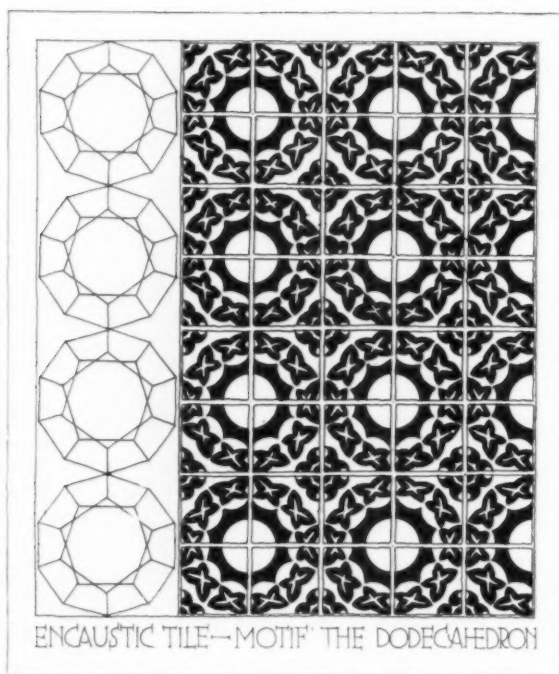


FIG. 13

skill and talent. I think that any open-minded critic would concede to "B," the greater beauty if only on the strength of the dictum, "Every increase in fitness is an increase in beauty."

Illustration 9 shows how profoundly ornament is modified by the nature of the material. For the three examples the same fundamental form has been used, an icosahedron in plane projection. When translated into brick, all that survives is the general outline; but the entire figure can be translated into leaded glass with scarcely the change of a phrase. In the perforated marble panel, though the generating figure

is not apparent, it controls and determines the entire pattern.

Illustrations 11, 12 and 13 represent all-over designs in which the dodecahedron in plane projection has been used as the determining figure, and they are also meant to show how the design is conditioned by the material. As in the former example, the leaded glass panel shows the fewest departures from the generating figure, because metal and glass lend themselves to geometrical patterns of this order with an especial ease and grace.

In the wrought iron design, on the other hand, the generating figure is scarce distinguishable, determining only the major elements and proportions. This is because heated iron is so readily *bent* that it flows as naturally to curves as does glass to straight lines, to which cutting is easy and bending impossible. The encaustic tile design lacks the interest of color, its very *raison d'être*, which must be left to the imagination of the reader. In this the basic figure is useful only as a *frame*, to determine and establish the major and minor units of the design.

More extended comment on the illustrations should be unnecessary: if they do not speak for themselves it is no use speaking for them. But whether or not they speak eloquently and convincingly, I feel sure that the reader will concede my main contention, that art is an expression of the world order, and therefore it is highly logical for the artist to seek inspiration where that world-order is writ clearest—in the field of number and geometry.



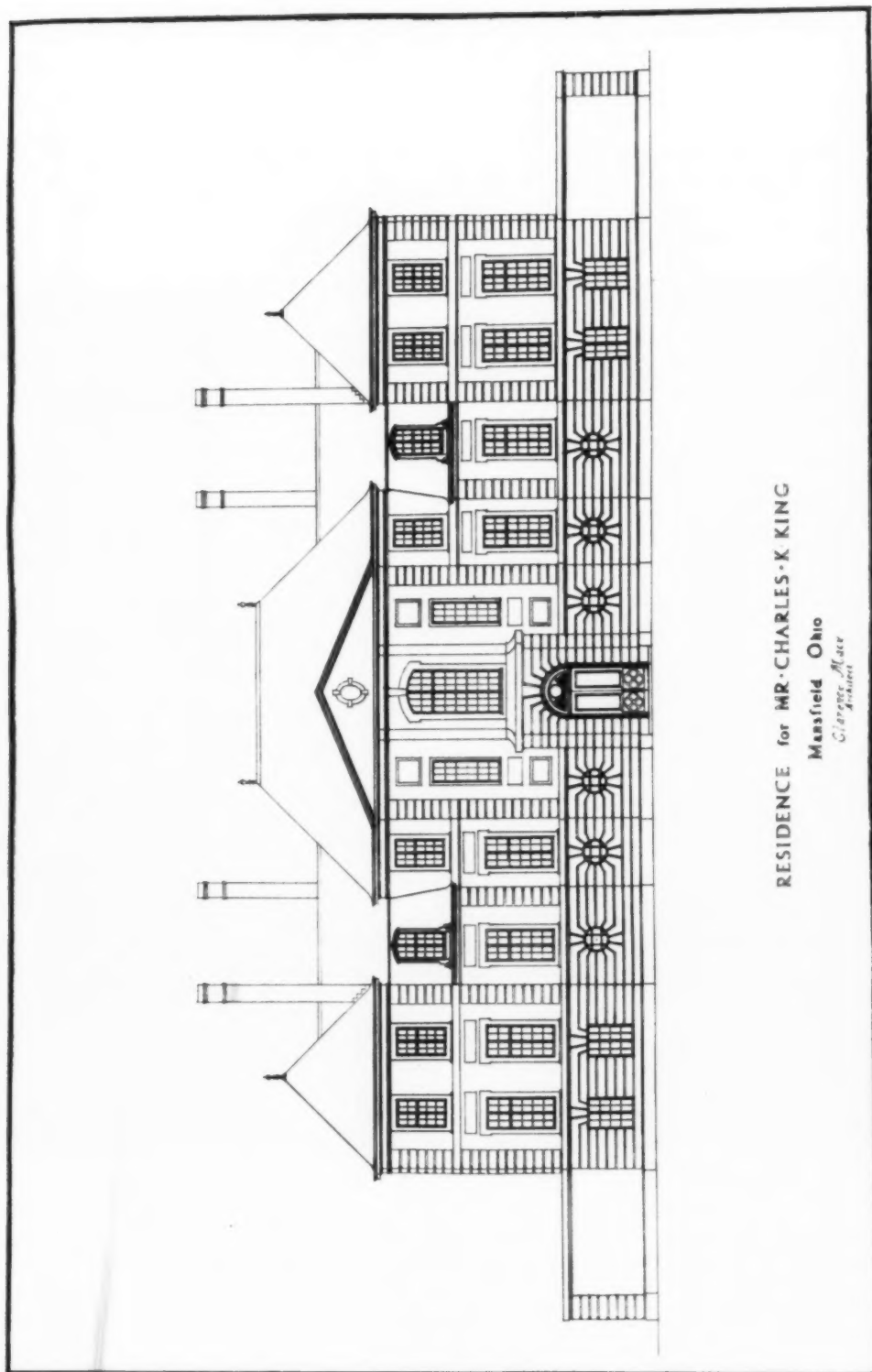
PORTFOLIO
OF
CURRENT ARCHITECTURE



Photo Tebbis & Kneel

"Kingwood"
Residence of Charles K. King, Esq., Mansfield, Ohio
CLARENCE MACK, ARCHITECT
WILLIAM PITKIN, JR., AND SEWARD H. MOTT, LANDSCAPE ARCHITECTS

FEATURING
COUNTRY RESIDENCES



RESIDENCE for MR. CHARLES K. KING

Massfield Ohio
Clarence Mace
Architect

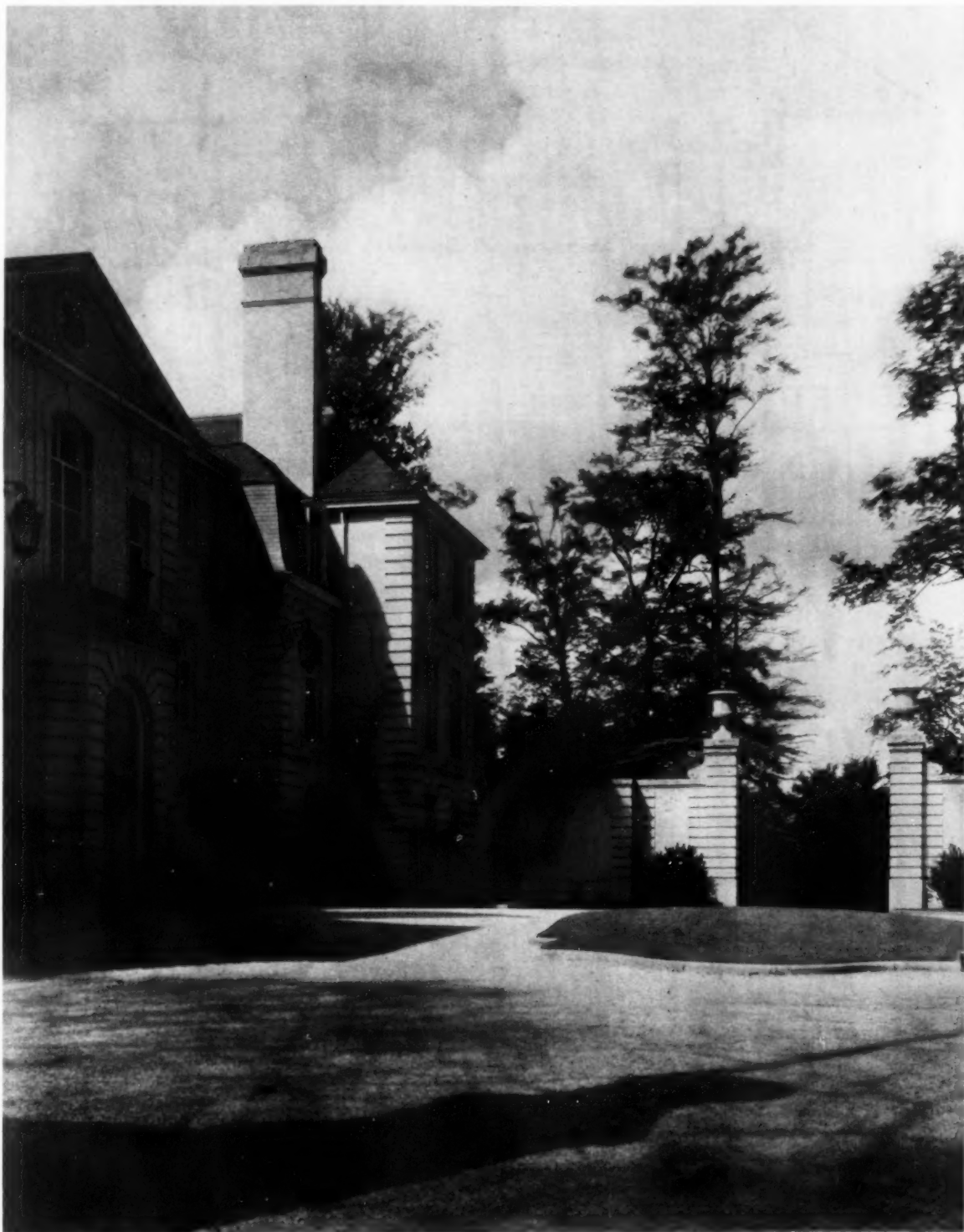
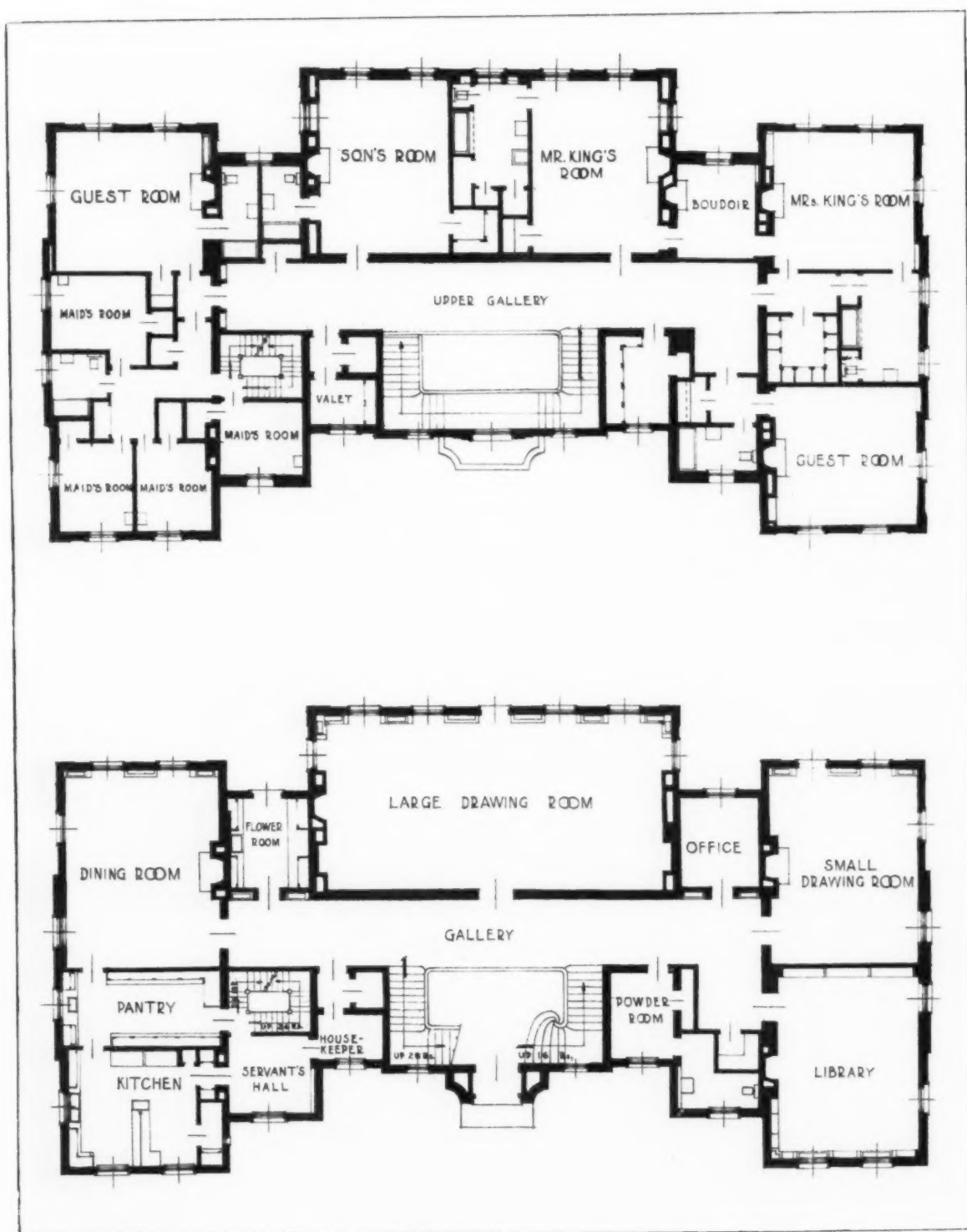


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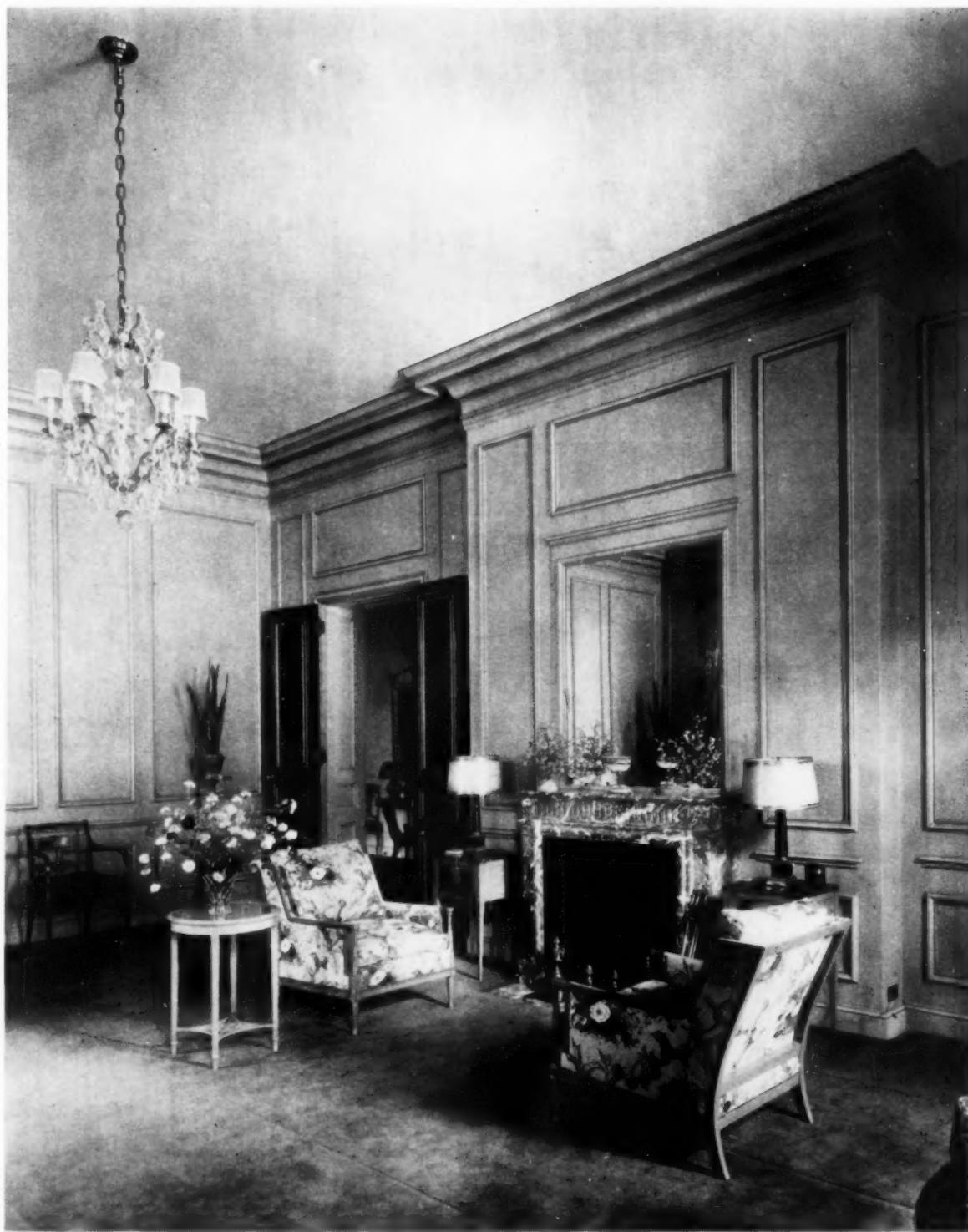
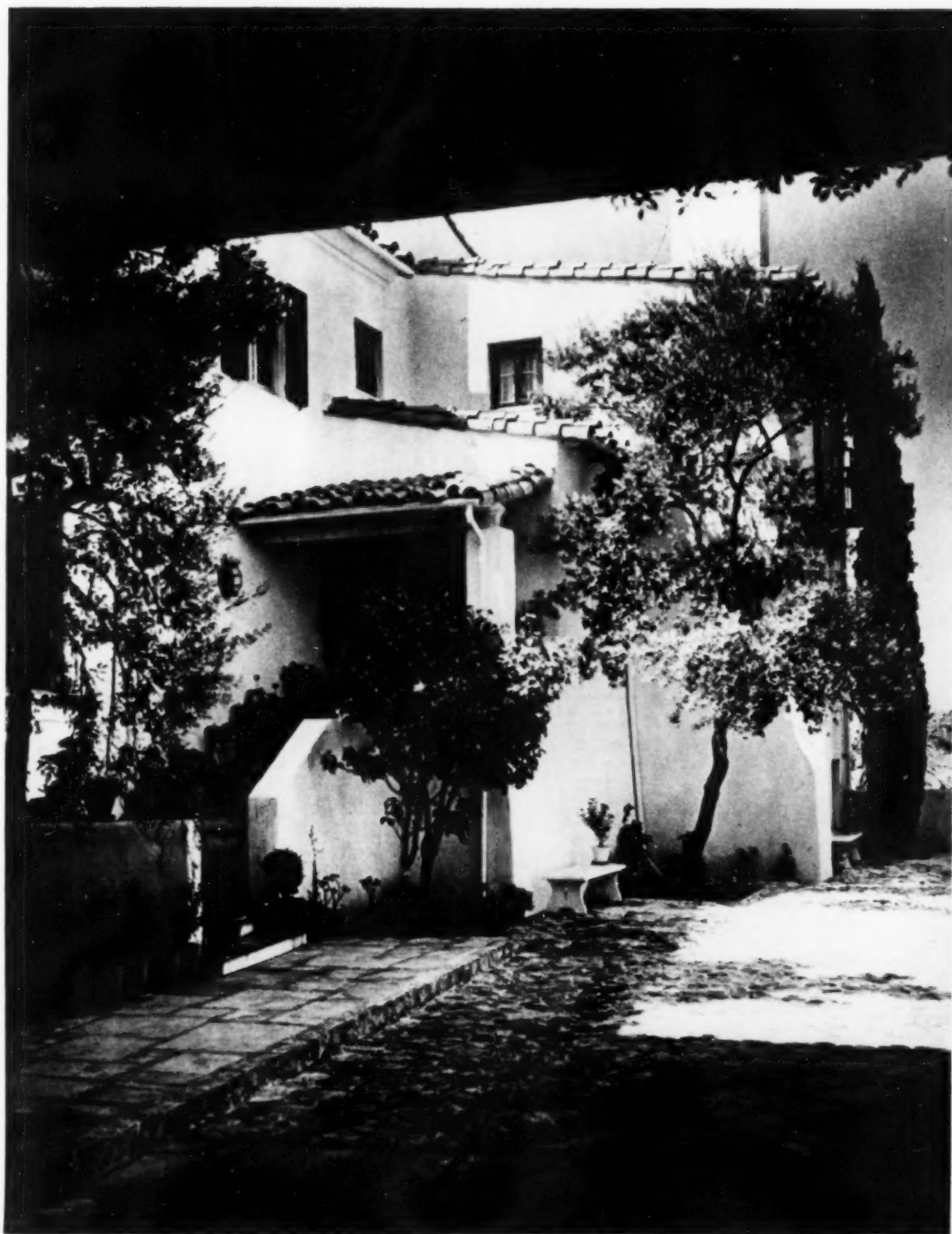
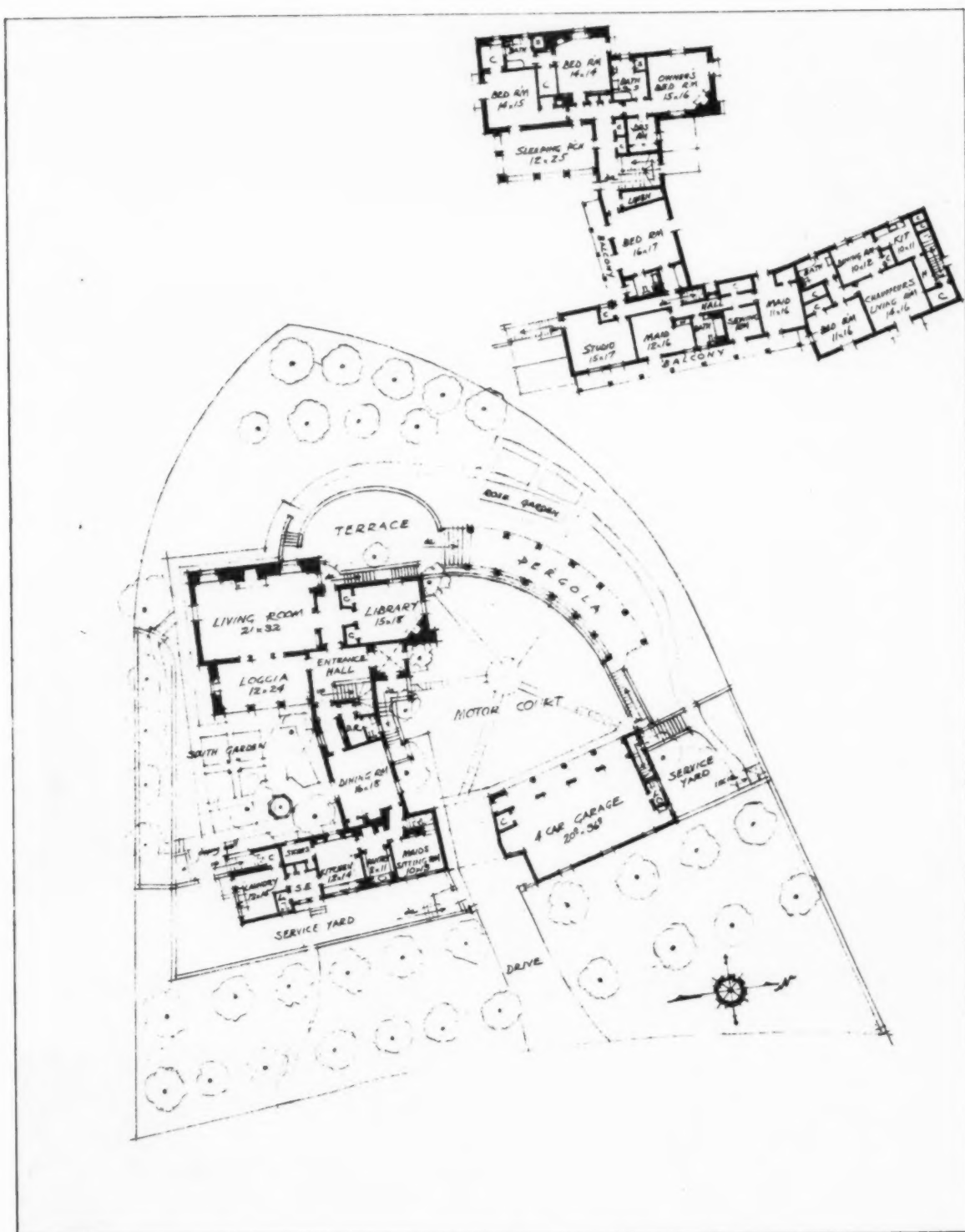


Photo Tebb & Knell

"Kingwood"
Residence of Charles K. King, Esq., Mansfield, Ohio
CLARENCE MACK, ARCHITECT



Residence of Mrs. Richard B. Fudger, Los Angeles, Calif.
ROLAND E. COATE, ARCHITECT



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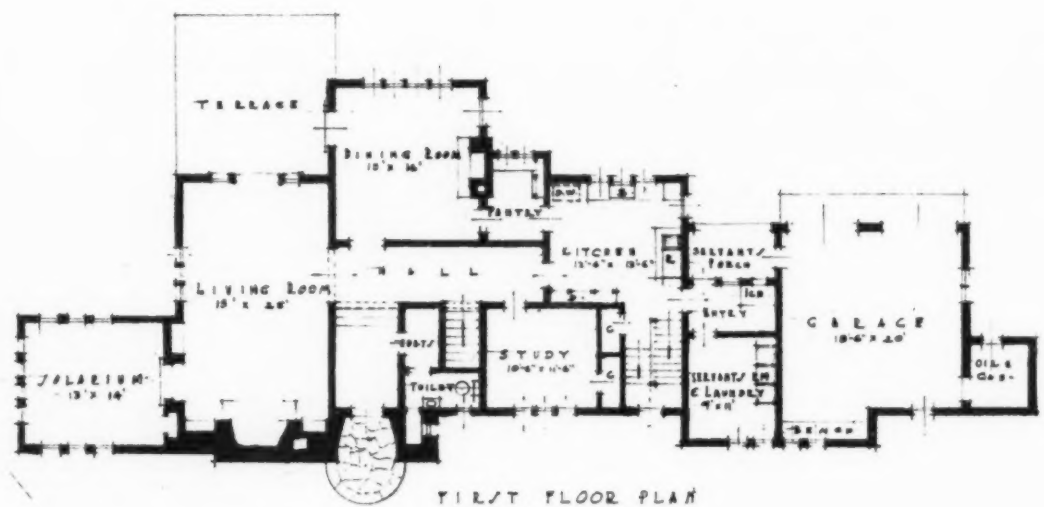
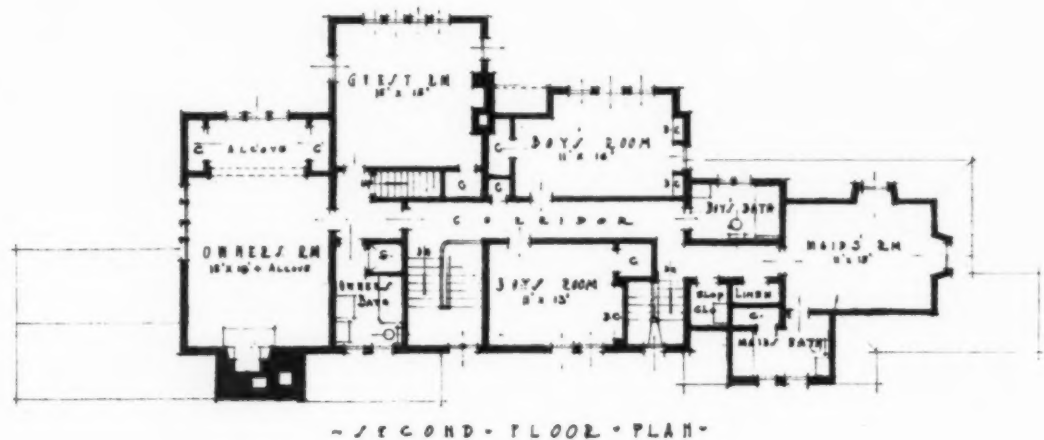


Residence of Mrs. Richard B. Fudger, Los Angeles, Calif.
ROLAND E. COATE, ARCHITECT



Photo Richard S. Grant

Residence of Mrs. C. A. Woodcock, Glens Falls, N. Y.
TOOKER & MARSH, ARCHITECTS



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Photo Richard S. Grant

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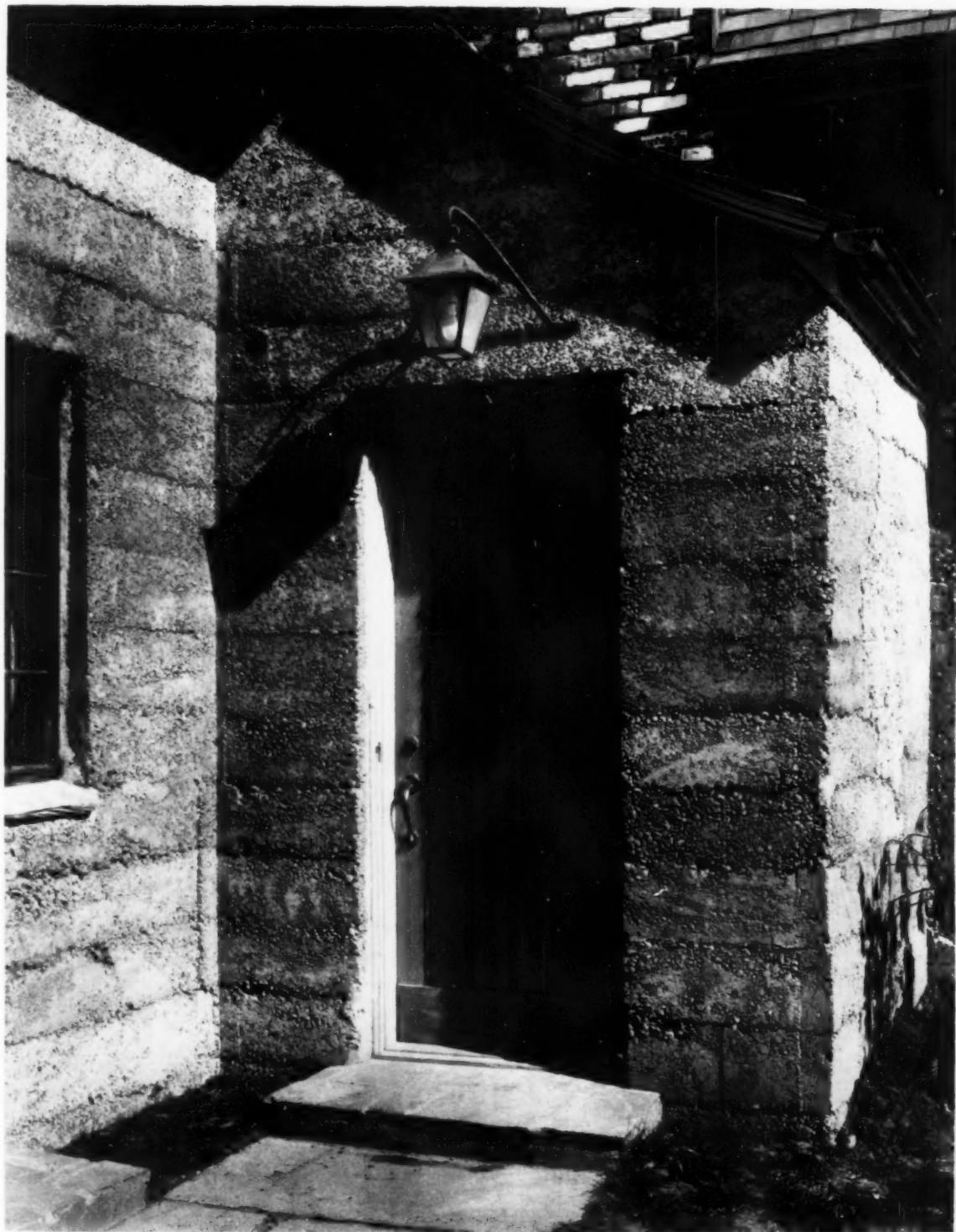
Photo Tebb & Knell

A Small House in Atlanta, Georgia
LAWRENCE FUNKE, ARCHITECT

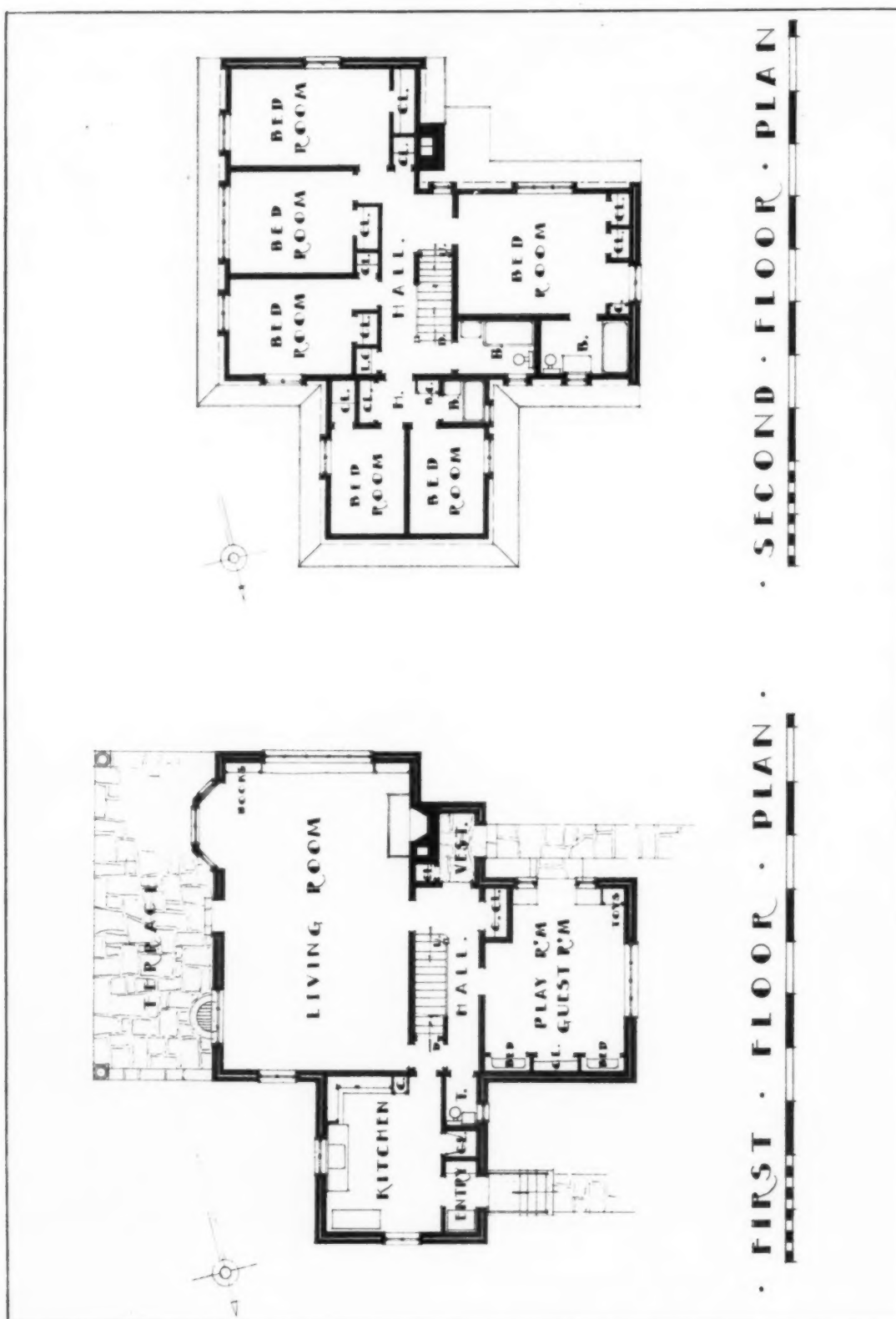


A Small House in Atlanta, Georgia
LAWRENCE FUNKE, ARCHITECT

Photo Tibbs & Knell



Entrance Door
Residence of Mr. and Mrs. A. Harris, White Plains, N. Y.
HERBERT LIPPMANN, ARCHITECT



Residence of Mr. and Mrs. A. Harris, White Plains, N. Y.
HERBERT LIPPMANN, ARCHITECT

WILLARD STRAIGHT HALL

DELANO & ALDRICH, ARCHITECTS

BY HERBERT CROLY

IN THE experience of the contemporary American architect the club-house assumes many different forms. It varies between the picturesque bungalow of a suburban golf course and a monumental building on a block front in some big city. But one of the most interesting of its forms, requiring at the same time something unusual in the way of design and an extremely complicated plan, is the students' union which has been or is being erected on the campus of many American universities. For these buildings must satisfy, not only all the catering, living and social needs which an ordinary club-house must satisfy, but they must also take care of a miscellaneous assortment of student activities. The students' union is not only a club-house which may have to serve one or several meals a day to fifteen hundred people, but an office building, a concert hall, a large assembly-room, a theatre and sometimes a gymnasium. It must, consequently, be a large building. Yet it should, like all club-houses and collegiate buildings, retain a certain domestic and reticent aspect, which forbids it to look as large as it is. One of the purposes of a university union is to neutralize in part for the student the feeling that he is a ward in an institution—to help him to the feeling that he is a citizen in a society and a human being in a fellowship. The union building should above all avoid the appearance of an institution. It should look like an inviting and an accommodating haven in which a student has a right to behave like himself.

In the case of Willard Straight Hall, which is illustrated herewith, the architects, Messrs. Delano and Aldrich, were in a sense expressly commissioned to build a

club-house which should by its looks ask the stranger-student in and promise him a warm welcome and congenial company. Willard Straight, after whom the building is named, was a graduate of the class of 1901 who had a positive gift for being attentive and kind to other human beings. Although he himself was an unusual social success at college, he may have remembered the forlorn feeling which overtakes many a shy freshman when he first matriculates at a large modern university. He may, perhaps, have remembered that in the case of Cornell, whose students are more apt to come from farmhouses and small towns than from cities or big preparatory schools, a large proportion of the entering class are perhaps peculiarly in need of domestication. They would find themselves much sooner in their new surroundings if something were done to make them feel that the university was a friend as well as an instructor, and offered them a fireside at which they could warm their hands and feet. At all events, when he died in December, 1918, there was found a provision in his will which bequeathed a certain amount of money to carry out a purpose of this kind. His widow, after considering carefully how such a purpose would best be realized, decided to build on the Cornell campus a university club-house which would, she hoped, help the strange student to feel at home and subsequently to provide means under one roof for the carrying on of all the non-athletic and non-academic student activities. It was important, consequently, that Willard Straight Hall should express in its design, as well as in its decoration, organization and policy, the fraternal and humane object which its founder had in mind.



Photo. J. P. Troy

WILLARD STRAIGHT HALL, CORNELL UNIVERSITY, ITHACA, N. Y.
DELANO & ALDRICH, ARCHITECTS

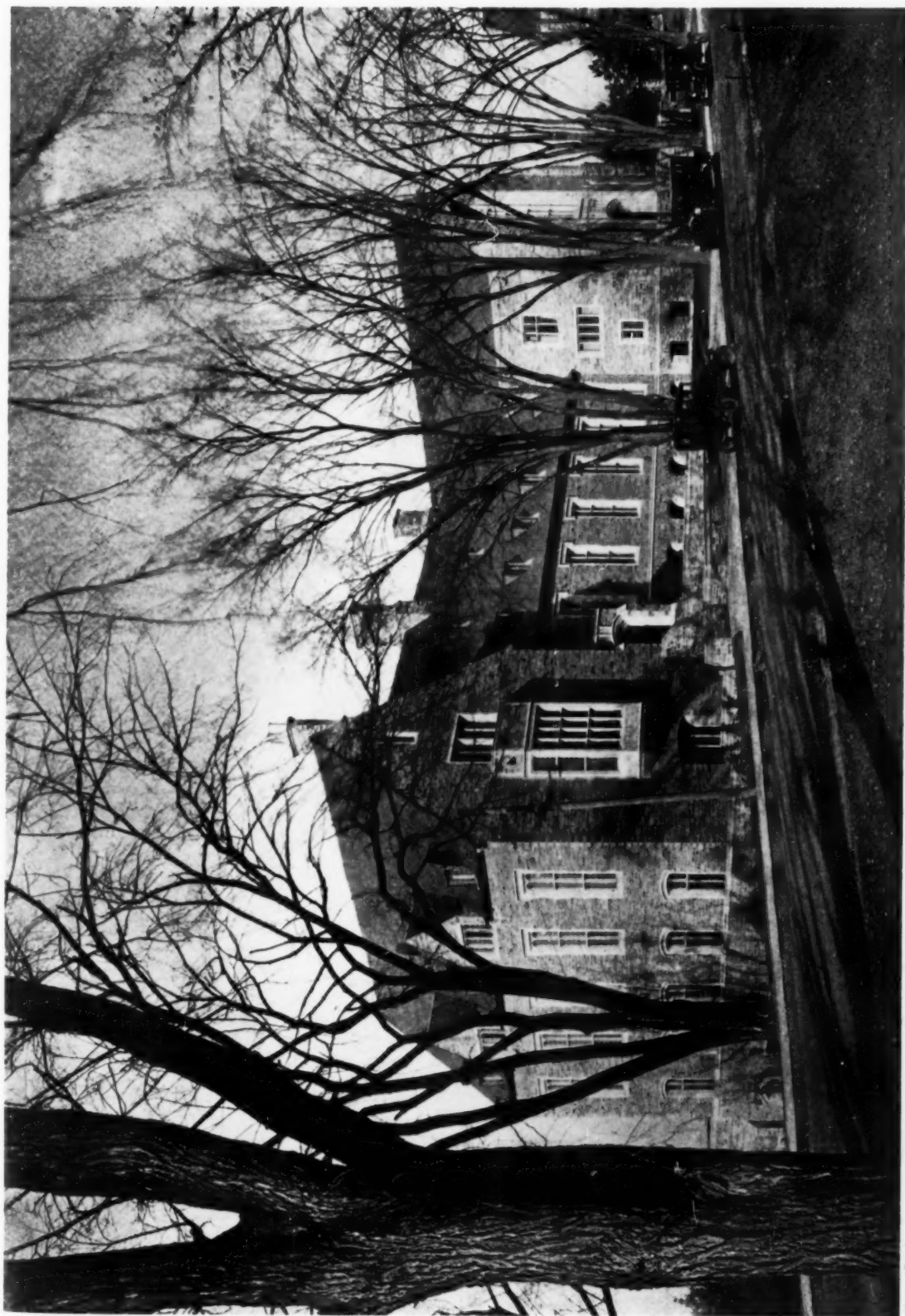


Photo. Fischer

WILLARD STRAIGHT HALL, CORNELL UNIVERSITY, ITHACA, N. Y.
DELANO & ALDRICH, ARCHITECTS



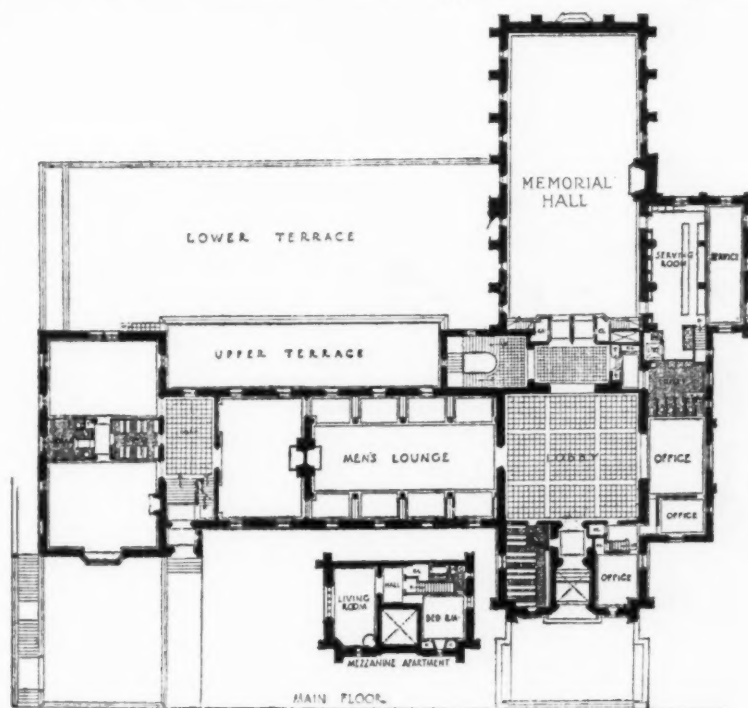
Photo. Fischer

WILLARD STRAIGHT HALL, CORNELL UNIVERSITY, ITHACA, N. Y.

DELANO & ALDRICH, ARCHITECTS

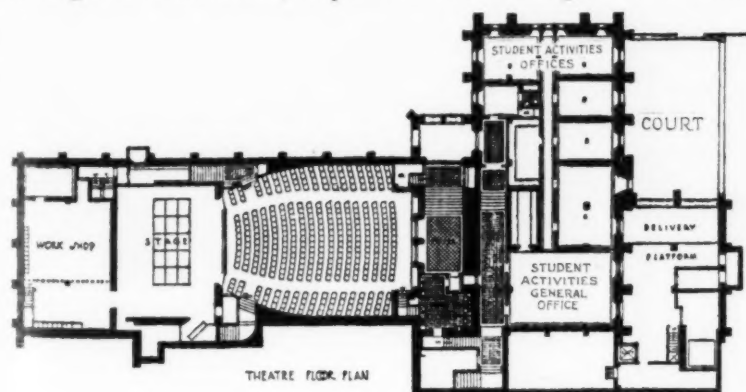
Before coming to a consideration of the design, it may be worth while to indicate the kind and variety of accommodation which, in return for the payment of a small fee, Willard Straight Hall offers to the Cornell student. The reader may get some sense of this by consulting the plans of the several floors which are published herewith. The main floor contains a spacious lobby decorated with wall paintings by Ezra Winter, which express with propriety and with a versatile imagination, the various aspirations associated with an intellectual life. On the axis with the entrance is the Memorial Hall to Willard Straight, which in scale and largeness of design is comparable to Harvard Hall in the Harvard club-house of New York. But while Harvard Hall is under-lighted from windows at only one end (the windows on one long side give upon a narrow court and afford little light) Willard Straight Hall, being similarly lofty, yet being lighted from spacious windows on three sides, is on the contrary in need of having its light subdued. Through the generosity of some alumni of the university, and particularly of Willard Straight's own class, a plan is now being

considered to substitute stained glass for the ordinary glass which now fills the sashes. If this is done it will relieve the students who occupy the hall during the



day from being too much exposed to sun and sky and not sufficiently enclosed. It will make of it more of a room in which to live, yet without taking away from its large nobility of style. The hall is used ordinarily as a lounge, but concerts are held in it on Sunday afternoons and other times, and on appropriate occasions it is given over to class dinners, dances and other festive purposes. On the other wing of the same floor there is another men's lounge which is really a library, a common lounge for students of both sexes, and two smaller lounges for women.

Below this main floor there is a basement, which, however, is a basement only in front. For the Willard Straight Hall is built on the side of a hill



which slopes gradually down to Cayuga Lake. So that a floor which is only a basement in front is in the rear a full-fledged story. It is by using the slope of the hill that the architect has obtained sufficient space to house on a still lower level the multifarious student activities which, if they had been provided for more conspicuously, would have made the building

rooms in warm weather; and he found abundant space for a small theatre, which is one of the most attractive, useful and popular parts of the edifice. The theatre and the rooms which are used for society meetings, offices and the like, are approached, of course, by separate entrances on the lower levels, so that the main entrance is not too much of a passage-way.

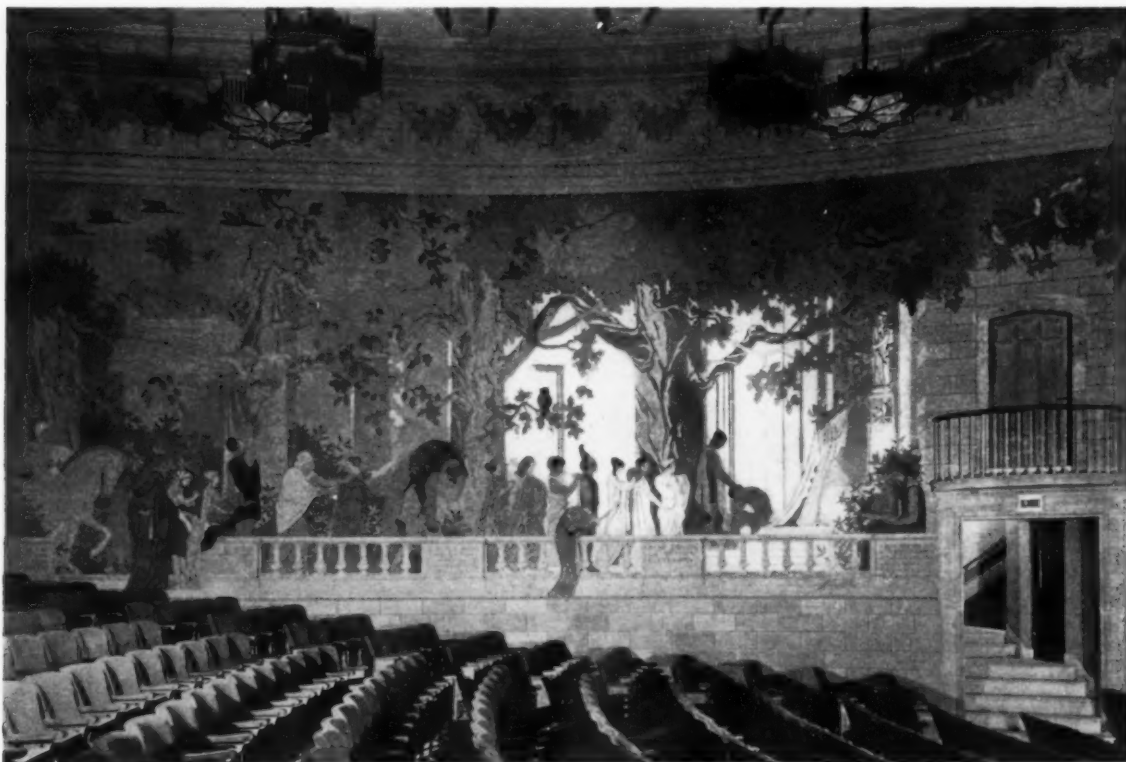


Photo. Fischer

MURAL IN THEATRE

WILLARD STRAIGHT HALL, CORNELL UNIVERSITY, ITHACA, N. Y.

DELANO & ALDRICH, ARCHITECTS

J. MONROE HEWLETT, MURAL PAINTER

look too big for a club-house. As it is he has placed the necessarily spacious kitchens and store-houses in the less well lighted front of the basement floor, and the dining-rooms, large and small and for men and women, in the better-lighted rear rooms. By increasing the area of the building on the lower levels, he has obtained on their roofs two magnificent terraces overlooking the lake, which provide outdoor

The upper part of the main building contains a billiard-room, a card-room, a dormitory for visiting athletic teams, and about a score of bed-rooms.

It is a singularly ingenious plan which meets successfully almost as many diverse and supplementary needs as a modern battleship. It takes full advantage of its superb site. In every possible way life in the building looks out upon the lake. Cornell uni-



Photo, Fischer

READING ROOM AND LOUNGE
WILLARD STRAIGHT HALL, CORNELL UNIVERSITY, ITHACA, N. Y.
DELANO & ALDRICH, ARCHITECTS



Photo. Fischer

LOBBY

WILLARD STRAIGHT HALL, CORNELL UNIVERSITY, ITHACA, N. Y.

DELANO & ALDRICH, ARCHITECTS

EZRA WINTER, MURAL PAINTER

versity is extraordinarily fortunate in its location. The lake is a large and long body of water, at the bottom of a spacious trough or valley. The slope down to the lake falls many hundred feet in a distance of a mile or more, and the slope on the other side takes about as long to attain a similar height. The view across the water to the opposite hill is most satisfactory as steady company. It is grand without artificiality or restlessness. The distance and the levels are well-proportioned and the land itself has the appearance of being well-cultivated, rich and fruitful. It is an appropriate site,

not for a villa, but for a living community such as a university. It is not a conventionally picturesque or pretty outlook. It is commonplace in composition and it is lacking in incident. But it remains much more satisfactory than most merely picturesque views. It is a comely but still essentially homely and rural countryside which looks as if it existed chiefly to be tilled and yield crops.

The situation of the university has not been used to any great architectural advantage, but neither on the whole has it been spoiled. Cornell has managed to keep a



Photo. Fischer

THEATRE

WILLARD STRAIGHT HALL, CORNELL UNIVERSITY, ITHACA, N. Y.

DELANO & ALDRICH, ARCHITECTS

J. MONROE HEWLETT, MURAL PAINTER

somewhat homely, miscellaneous unpretentious collegiate atmosphere, appropriate to a university which is partly supported by the state and which is distinguished particularly for its agricultural school. Willard Straight Hall fits naturally into these surroundings. It is not too formal. Neither is it too picturesque. The façade is a carefully balanced composition in a somewhat loose and free style. But it avoids pretensions of any kind—the pretension either of being an important institution or of being picturesque and eccentric. It finds space for one of the noblest rooms in any university in this

country, and for literally a multitude of petty conflicting requirements. Yet it does this without strain or pose or practical inconvenience. It provides the students of Cornell of both sexes with a gracious and hospitable mansion which is in a very real sense their own. It provides them with a community house to which they belong from the beginning as human beings, in which they will not be lectured and instructed and graded, and which asks nothing in return except a small fee and the ordinary decencies of human intercourse.

For practical purposes the students control

the building. The final governing body is a board which is appointed by the trustees of the University. It is made up of the president, three professors, three trustees, three alumni, the comptroller, the dean of women, two undergraduates who serve by virtue of the office which they hold as president of Willard Straight Hall and of the student council. This government meets, however, once a year and concerns itself only with finances and matters of broad policy. The director of the hall is appointed by the board of governors and is directly responsible to it. The actual administration of the building is confided to a board of managers. It is made up of fifteen members, of whom ten are undergraduates, elected by the student body. Eight of the undergraduates are men and two women, which corresponds roughly to the comparative number of students of the two sexes in the university. Of the ten seven are seniors and three juniors. Besides the ten undergraduates there are three members of the faculty, a resident alumnus and the director of the hall who serves *ex officio*. The chairman of the board of managers, who is also president of Willard Straight Hall, is a senior. The secretary is also a senior. The board of managers meets regularly every third Friday, and matters that come up between these meetings are handled by the executive committee which is made up by the secretary and the president of the board, the senior woman, and the director. It is stated that notwithstanding the existence of the board of governors, the board of managers feel themselves in a very real sense obliged to exercise administrative authority—as much authority, let us say, as a house committee would exercise in an ordinary club.

The chief drawback to the building at present is merely a repetition of the chief drawback of the union. It is too new and too inexperienced to serve and to look its purpose. After the Cornell student body has lived in it for a generation there will be a different story to tell. By that time, Cornell will, we hope, have become, in company with other American universities, more of an intellectual community and its student body will as a part of its common mental life carry on a variety of new and, let us hope, somewhat more leavening activities. Among those which are already accommodated in Willard Straight Hall, the one which obtains and deserves most space is the theatre. The students' dramatic club, under intelligent and enthusiastic faculty guidance, give throughout the college term a succession of plays amounting almost to one a week, and these performances, to judge from one sample, are at least creditable. They certainly provide a convincing example of a student activity which is more likely to be personally liberating and socially educational than, say, the playing of an athletic team or the editing of a college paper. Probably in the future activities of this kind, in which there is less competition and to which the victory over an opponent is less important, will gain at the expense of athletics, and as they gain, a community house such as Willard Straight Hall will mellow in its appearance and in its functioning. It will help both the students and the university administration to cultivate voluntary social and educational projects and interests, and by housing them under one roof give those who pursue them an increased sense that they are being carried on as part of the increase of one society.

IN THE CAUSE OF ARCHITECTURE

BY FRANK LLOYD WRIGHT

V. THE MEANING OF MATERIALS—THE KILN

I SEE TANG glazes and Sung soft-clay figures from Chinese tombs in my studio as I write,—a few of the noble Tang glazed horses that show Greek influence,—and Han pottery. Some fragments of the Racca blue-glazed pots and the colored tiles of the Persians in Asia Minor—"the cradle of the race,"—Egyptian vessels and scarabs.

It appears from a glance the oven is as old as civilization at least—which is old enough for us.

Our interest is not archaeological but architectural and begins with a lump of peculiarly pliable clay in the hand of the man who wants to make something useful and at the same time beautiful out of it,—at the time when he knows he can bake it hard enough to make it serviceable. Then it all begins to grow rapidly in the experimental search for different clays. The grinding of minerals, to make paste for a flux to pour over the vessels to make them impervious and beautiful—and the legion of earnest chemical experiments that followed. The research of devoted craftsmen for several hundred centuries have laid up treasure and all but lost it but for a specimen or two—times without number.

The remains are a fascinating record of man's creative endeavor on his earth. A record that tells more of him probably than any other—for in it we find not only pottery and building but painting, sculpture and script intimately related to the life of all the peoples who have inhabited the earth—since cave-dwellers built their fires.

All the materials we know, seem at one time or another in a state of flux. Fire is father-creator to them all—below ground. Light is mother-creator to all that rise in air out of the ground. Back to Fire again

goes that which Fire made to be fused with man's creative power into another creation—that of his use and beauty.

Anything permanent as a constructive material comes into man's hands by way of Fire, as he has slowly learned to approach in "degrees" the heat in which his globe of earth was formed—and courage to set what he has himself made, again at its beneficent mercy. He knows much. But fire knows more and has constant surprises for him.

He will never exhaust them all—nor need to.

He has the Brick.

He has the Tile.

He has the Pot and Bowl.

He has the Vase.

He has the Image.

He may color them all—forever so far as he knows—with the hues of nature and qualify each according to any or all the sensibilities he has—taught by the qualities he loves in the work of Nature all about him.

We have hitherto been speaking of "natural" materials. The natural material here is of earth itself. But to produce this material known as Ceramics, another element, that of the artificer, has entered with Fire.

This product should therefore be nearer man's desire—molded, as it is, by himself. His creation is seen in it. What he has sensed of the story of his creation, he has put into it.

He sees as he is and this record will tell us what he sees, how he sees—as he sees it.

He has seen nothing he is not himself. He is the imaginative geometrical tracery of the Persian and Moor and the noblest

brick buildings man has ever erected. He is the noble sculpture and pottery of the Han Dynasty in China, as well as the Satsuma and Nabeshima of Japan. His is the story painted on the pots and bowls of Greece no less than the flowered plaques of Byzantium, or upon the utensils of the Indian cliff dweller.

His sense of form he took from those forms already made as his natural environment. In his striving for excellence in quality he was taught what to love by stone, leaf and mold and flower—the book of “trees,” the mosses and mists and the mosaics of foliage in the sun. Especially in China where his sense of Nature was profound did he learn from them. When he was at his best, he interpreted what he saw.

When he was inferior, he imitated it.

But always, superior or inferior, he was its reflection in his Ceramics as in a mirror.

And in spirit looking away from himself, his eyes fixed on Gods as God or God as Gods—fashioning and firing and building as he himself was burning, all the while, better than he *knew*.

What has Man to show for the Brick? I should offer the brick buildings of Asia Minor—Persia.

What he has to show for his Tile? Wherever Persian or Mohammedan influence was supreme.

What he has to show for the Pot and Bowl? Chinese pottery.

What he has to show for his Vase? The Grecian urn.

To show for his Image? Those of Egypt, Greece and China.

The modern contribution to Ceramics as building material is “Terra Cotta.” A poor name for an important material—but so it is named. I suppose “earthen-ware” seemed inadequate or not specific.

And it is the greatest opportunity for the creative artist of all the materials he may choose. It is, of course, burned clay in any color or glaze for entire buildings—pottery

buildings! Earthenware on a great scale.

Modern terra-cotta has known but one creative master—only one—Louis H. Sullivan.

He is dead. His work in terra-cotta will live long after him. His was the temperament and the imagination that naturally found in this impressionable material the ideal medium for his genius. Terra-cotta lives only as it takes the impression of human imagination. It is a material for the modeler. It is in the architect's hand what wax is in the sculptor's hand.

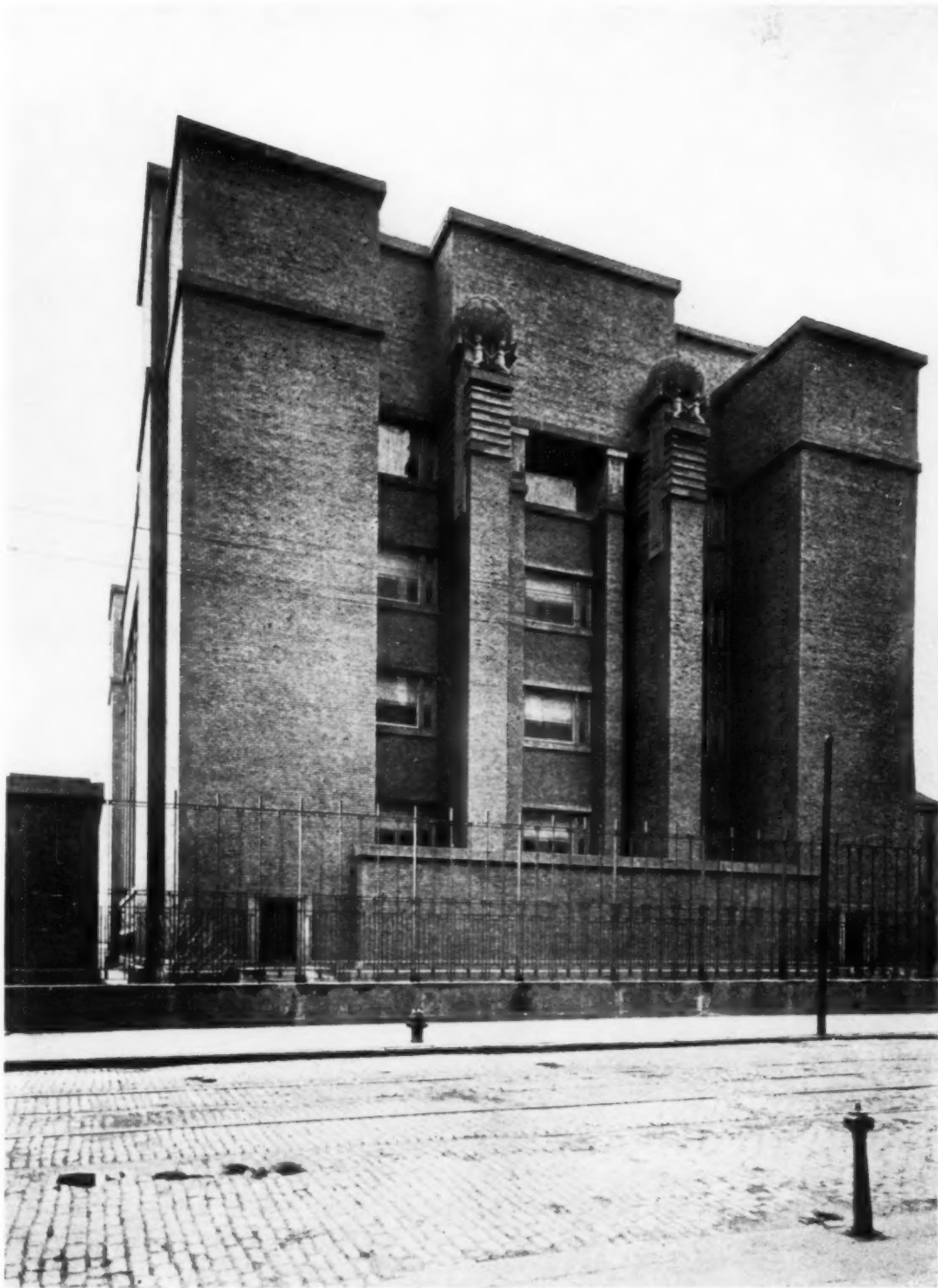
After the material takes shape, the surface treatments are all a matter of taste. They are limitless in quality and style.

And the chief business of terra-cotta has been to imitate stone. It would imitate anything else as readily—with gratitude—it seems. It is the misfortune of anything impressionable to be called upon to give imitations. Mimicry is all too human. To imitate is the natural tendency of men. Not Man.

But Louis H. Sullivan's exuberant, sensuous nature and brilliant imagination took terra-cotta—and it lived. It no longer asked permission of the Styles. It was *itself* because it was Louis H. Sullivan. In it this master created a grammar of ornament all his own. And notwithstanding certain realistic tendencies, an original style of ornamentation out of the man, astonishing in range, never lacking virility.

Into the living intricacy of his loving modulations of surface, “background”—the curse of all stupid ornament—ceased to exist. None might see where terra-cotta left off and ornamentation came to life. A fragment of Sullivanian Terra-cotta—were we at some remote period of time to be excavated—would be found with a thrill. It would mean that a man lived among us at a dead time in Art.

The Sullivanian motif was efflorescent, exvolute, supported by tracery of geometric motives—bringing up the clay in forms so delicate and varied and lively



BRICK MASSES
THE LARKIN BUILDING, BUFFALO, N. Y.
FRANK LLOYD WRIGHT, ARCHITECT



DETAIL OF BRICK WORK
THE ROBIE HOME, WOODLAWN AVENUE, CHICAGO
FRANK LLOYD WRIGHT, ARCHITECT

that no parallel in these respects exists.

We may see, for once, how completely a negative material can be appropriately brought to life by the creative artist. It is reassuring.

Is there in Architectural history another man who out of himself not only created an exuberant type of beautiful architectural relief but furnished it forth, always consistent in style, in amazing variety that could not have ended but with his death? Even toward the last of his life, enfeebled, disillusioned but indomitable, he drew with all his old-time freshness of touch a series of beautiful designs that show no falling off in power whatever—even in spontaneity.

His ornamentation was the breath of his life. Clay came into his hand, that both might live on forever.

Because, now that we know what terra-cotta can be, and how it can be, we shall never be satisfied to see it degraded to imi-

tation again—nor satisfied to see it imitating him.

Taught by him we should learn how to use it. If not so well as he, at least on principle for its own sake as he did. His sense of Architecture found a fulness of expression in the plastic clay. Few architects ever find any such expression in any medium whatsoever.

Terra-cotta should revere him as its God, sing his praises, but, better than that, be true to his teaching which would mean more to him than psalms in his praise and his statue in the hills.

In the terra-cotta or pottery of Earthenware building we may have, today, the sum and substance of all the kiln ever gave to architecture.

Modern methods have made the complete terra-cotta building, inside and outside, as definite a possibility as was the Han vessel in its time or the Greek vase. But—who



A COTTAGE OF SAND-MOLD BRICK
THE CHENEY HOME, OAK PARK, ILLINOIS
FRANK LLOYD WRIGHT, ARCHITECT

would look upon it in its present state after Sullivan left it, as a work of Art?

It cannot live either on its own texture or color—to any great extent. And as for its design? It is a mendicant feeding on crumbs from the table of the styles.

Why? Is it because Sullivan is dead? Did this most valuable of modern achievements in "material" die with him, as it never really lived until he came?

No. Materials never die. This material is only asleep, waiting for some master to waken it to life.

Here, young man in architecture, is a golden opportunity quite boundless so far as imagination goes. Rescue the royal beggar from penury and slavery.

Where is the pottery-building beautiful in form and texture and color—as such?

Why are there not thousands cleaning themselves in the rain—warming themselves in the sun—growing richer with age

instead of dingy and sad and old? Why do they look cheap and soon stale?

Just because there are no good pottery designs for good pottery buildings—so how can the pottery be good with no more inspiration than that?

A neglected minion of the Machine!

By way of terra-cotta we are here arrived at the matter of Ornament. Because terra-cotta chiefly lives by virtue of the human imagination in ornamentation.

As we intend to discuss ornament by itself on its merits, later, let us say now that true ornament is of the thing, never on it. The Material develops into its own ornamentation by will of the master. He does not impose forms upon it. He develops it into forms from the within which is characteristic of its nature—if he is "the master."

We may see this in Sullivanian Terra Cotta. The only limit to Sullivan's treat-

ment was the degree to which the substance of the pliable clay would stay up between the thumb and finger and come through the fire. Background disappeared but surface was preserved. There was no sense of background, as such, anywhere. All was of the surface, out of the material. So no sense of ornament as *applied* to Terra-Cotta, because Terra-cotta became ornament and ornamented itself.

Terra-Cotta was this master's natural medium because his sense of beautiful form was the subtle fluctuation of flowering surface, song-like, as found in organic plant-life—the music of the crystal is seen as a minor accompaniment only.

The tones of the main theme are those of organic efflorescence—*growth* as it is performed by plant species. This idea of growth was the theme—invariably—which he glorified.

He created a "species" himself—and kept on creating others.

This procedure of Growth intrigued his imagination—inspired him. "Organic" was his God-word, as he traced Form to Function.

When, I suggested, as I once did, that quite as likely the function might be traced to the form, he disposed of the heresy—by putting it on a par with the old debating-school argument as to which came first, the Hen or the Egg. His interpretation was to him the Song-of-creation and he never tired of singing it. As it was visible to him in the growth of the plant he saw it in all—as indeed it may be.

Think of this when you see his synthetic motifs in his sentient Terra-Cotta.

And realize that there are ways of making a pottery building, the joints of the material becoming unit-lines in the pattern of the whole—which he, the pioneer, touches upon but was called away before realization or called away *to* realization—who knows?—and imagine the glorious marvel of beauty it might be.

I remember going to Palermo some years

ago to see the mosaics of Monreale.

I had just got into the Cathedral-square and lifted my eyes to that great work when to the left I saw—or did I see it—for some moments I thought I dreamed—there against the sky—no not against it, of it, literally of the sky was a great dome of pure Racca blue.

I forgot the Cathedral for quite some time in the wonderful blue dome so simple in form—a heavenly thing. I have never recovered from it. And that effect was "Ceramic." Why not Terra Cotta? The old qualities in color firing can not be dead!

* * * *

To illustrate a simple use of brick I refer for noble examples to Ispahan, Sari, Varamin, Amol, Samarkand, Bokhara, and, of course, tile and pottery as well. Unfortunately I have little brickwork to my credit. I have chosen a few examples that show the walls solidified by emphasis of the horizontal joint, and examples showing the brick-pier and mass as I feel it to be natural in brick construction today. Brick is the material we in Usonia know and love best. We probably have brought brick-making to a pitch of perfection never existing in the world before at any time. And we use it, on the whole very well. Not only is the range inexhaustible in texture and color and shape, but the material itself is admirable in quality.

Together with it go all those baked-clay vitreous hollow bricks and hollow tiles which are probably the most useful of all materials in building in our climate.

* * * *

Usonian tiles and mosaics do not reach the quality of ancient or even contemporary materials of this nature. There is enough good material, however, to warrant a more general use which would inevitably cause it to grow better—and our day needs this development.

The nature of the mosaic either of stone, glass or ceramics is a truly architectural medium—useful in this era of the Machine and lending itself to plastic treatment with

no insult to its nature. I should like to see whole buildings clothed in this medium.

Our pottery is imitative. We have had Teco, Rookwood and other types—all deserving experiments with something of originality in most of them. But none proceeding on principle to develop style, but of the nature and character of the process.

The "vessel" does not inspire us, it seems, as it did earlier people. Perhaps because we know no such need of it as they knew. I have chosen some natural "vessels" to show the help nature generously offers in the matter, to mention only one humble resource.

* * * *

The Usonian Image, likewise the Vase, is tentative when not openly imitative.

We seem to have little or nothing to say in the clay figure or pottery vase as concrete expression of the ideal of beauty that is our own. No sense of form has developed among us that can be called creative—adapted to that material. And it may never come. The life that flowed into this channel in ancient times apparently now goes somewhere else.

A few natural forms found in the Champlain clays seem interesting to me in this connection.

* * * *

Again our subject remains in barest outline—for to go adequately into this most human and important feature of all Man's endeavor to be and to remain beautiful the "kiln" would exhaust interesting volumes.



BRICK AND LAVA. CANTILEVER BALCONY OVER PROMENADE ENTRANCE SHOWING PERFORATED BRICK SCREENS AND LIGHTING FIXTURES BUILT IN AS PART OF THE ARCHITECTURE

HOTEL IMPERIAL, TOKIO

FRANK LLOYD WRIGHT, ARCHITECT



SUSANNA FOUNTAIN, HOME OF CARL MILLES, LIDINGÖ, SWEDEN

CARL MILLES, SCULPTOR

EVERT MILLES, ARCHITECT

✓ CARL MILLES
SCULPTOR-ARCHITECT
BY KINETON PARKES

THE NEW ARCHITECTURE in Europe reaches its most vehement exposition in Sweden. Architecture is the mother of the arts and Ragnar Östberg in his great Town Hall at Stockholm, recognizing the relationship, has given sculpture and the other plastic forms of expression a maternal home. He has successfully substituted sculptural affection for plastic affectation.

Just outside the city there is a further and cognate manifestation of the relationship, architecturally on a smaller scale but greater in its intimacy, and sculpturally and architecturally satisfying. It consists of the studios, house, gardens and pleasure of Carl Milles.

There are few harbours more beautiful than that of Stockholm and in choosing the position, the artist gave an initial indication of his architectural instinct. It is an ideal setting for the activities of a great artist, on high ground at Lidingö above the Värtan surrounded by pine trees, their trunks ruddy in the sun.

This singular habitat is almost wholly the creation of Carl Milles himself, but his brother Evert Milles, a practising architect, helped in the constructional work. The Milles family is artistic, for Carl and Evert are brothers of Ruth Milles the sculptor—not unknown in America and with a European reputation.

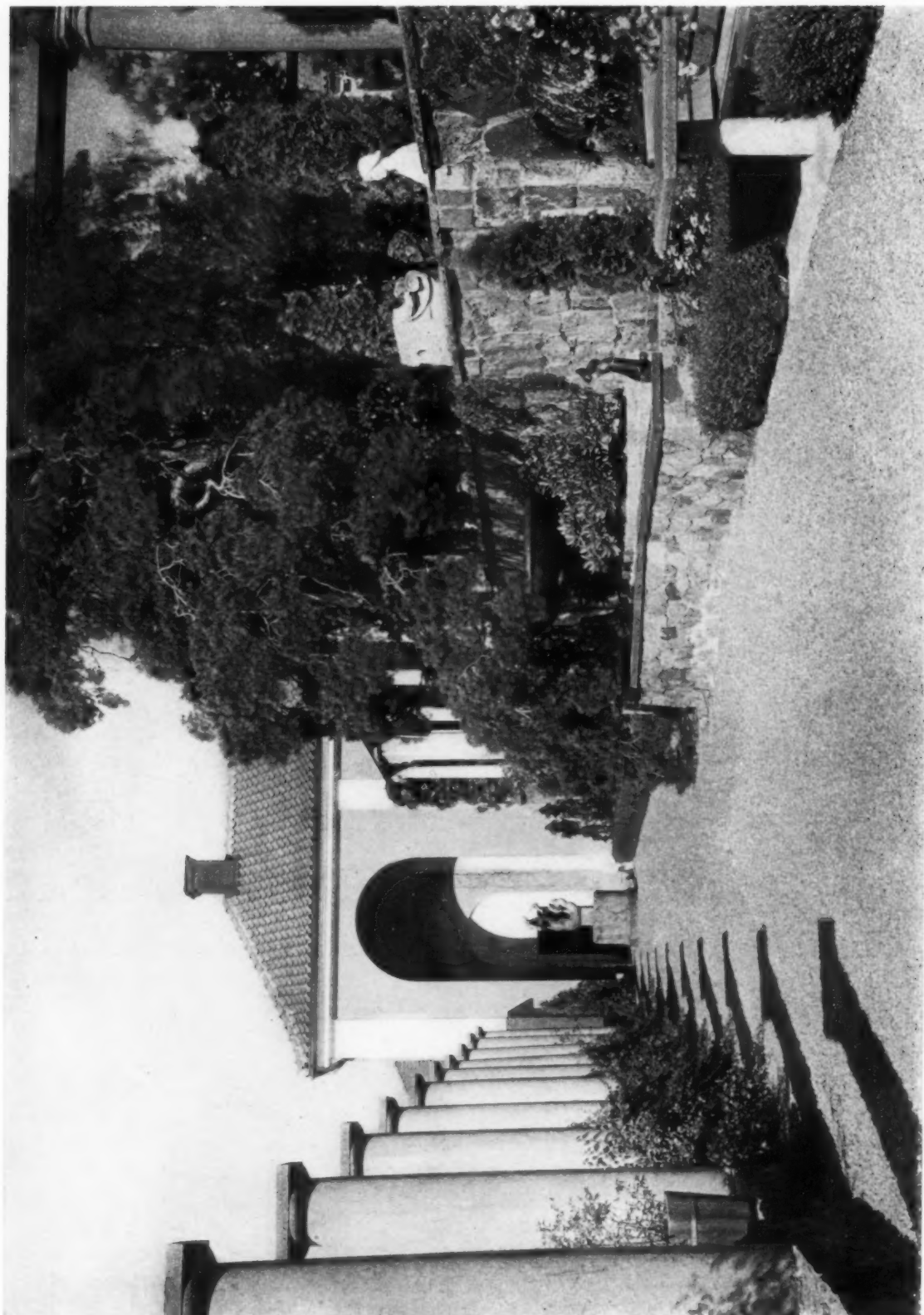
In this domain of beautiful buildings, picturesque walls broken by niches, pergolas and tiled walks, paved courts, ponds, terraces and flagged steps, the muse of sculpture reigns. It is a plastic conception of the finest kind realized with a singular integrity, without ostentation and without error of proportion, for composure is the necessity of art and life to the man who has

made this domain wherein to dwell and work.

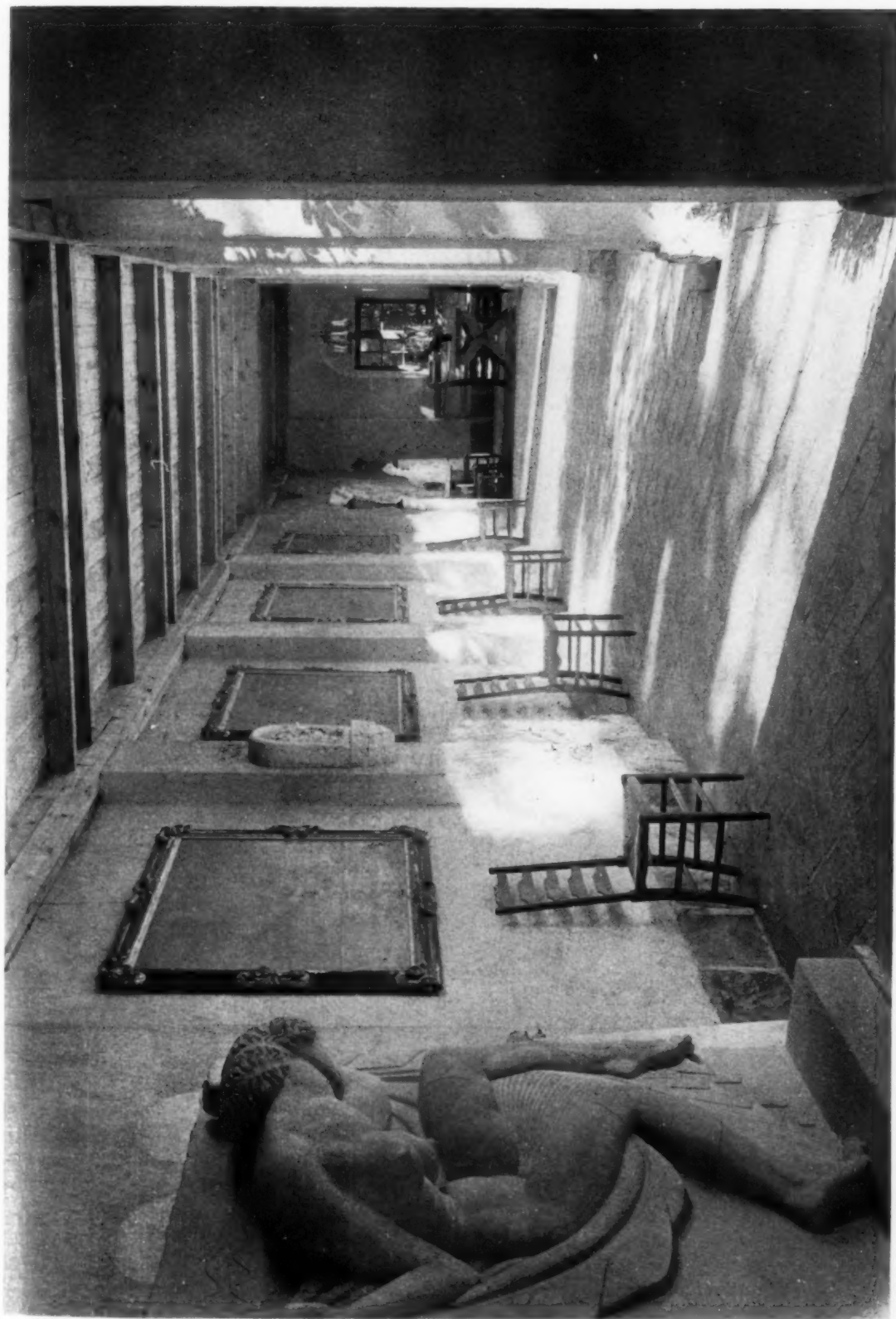
Carl Milles is slow-moving and slow-speaking, but his phlegmatism is illumined by the fire of genius. His demeanor is almost sad and he speaks gently and only when he has thought out what he wants to say. Sometimes what he says is brightened by a touch of gentle humor. He is very particular as to what opinion he may have to express, for his mind is occupied by the responsibility of his mission—a mission that gives new beauty in plastic form to the world. This weighs on him as he slowly paces the paths of his retreat at Lidingö.

He is by no means unconscious of tradition, little as his work owes to it directly. In his work there is no violation of the plastic or glyptic traditions, for, like all great artists, Carl Milles has realized the obligation which tradition imposes. He feels the weight of this and acutely, but not ponderously, acknowledges it. He says he owes much to Michelangelo and something to Rodin; to Carl Milles we owe what we owe to Michelangelo and Rodin—a new sculptural vision.

Tireless worker himself, Carl Milles makes others work. He has a latent energy which he is able to communicate; he has the will to create but an exuberance of production which is beyond the powers of a single individual. His kinetic energy is catching, and he is able to impose his will on those associated with him. He has always in his studios twenty men cutting granite. One man spends the whole of his time in repairing, tempering, sharpening their chisels. Granite is intractable, but Carl Milles shows his assistants how it becomes docile under his hands, for he is a



THE PILLARED TERRACE, HOME OF CARL MILLES, LIDINGÖ, SWEDEN
CARL MILLES, SCULPTOR
EVERT MILLES, ARCHITECT



LOGGIA, HOME OF CARL MILLES, LIDINGÖ, SWEDEN
CARL MILLES, SCULPTOR
EVERT MILLES, ARCHITECT

believer in carving although he cannot carve everything that issues from his studios himself. But all the essential things are subject to his chisel.

Further, there are the bronze casters, for Carl Milles is a modeller as well as carver. He has no time to make the mould for the castings nor to cast, but his personality passes into his helpers and produces the exquisite patinas which are a characteristic of most of his bronzes. This abounding energy is a feature of both production and finished work. It is communicated to each piece that passes muster in the master's review. If it fails, it is thrown aside. This vital energy is possessed by all the acknowledged works without outraging the principles of sculptural statics. It is less a vitality of movement than a vitality of spirit that they all possess.

Carl Milles was born at Lagga in Sweden in 1875. After beginning his art education at the Stockholm Technical School he went to the École des Beaux-Arts and remained some years in Paris exhibiting at the Salons, sending to the expositions at Venice and later working in Munich. His health was not good, but the divine fire of art burned with no uncertain flame within him and he surmounted his bodily ailment and became one of the most prolific of the world's sculptors.

He was but twenty-seven years old when, in 1902, he came into the front rank of Swedish sculptors with his monument of Sten Sture for erection at Uppsala. It was not awarded the prize but was considered so good that the original sketch was developed some years later. From 1910 to 1914, when the memorial was at length finished, the artist worked at it laboriously while his friends collected the funds for its building. It is known as the Battle of Brunkebjärg memorial, for Sten Sture not only founded the University of Uppsala but led the peasant troops in 1471 against the Danes victoriously.

Apart from his own actual architectural

activities, the association of Carl Milles with architects has always been close. He believes in the maintenance of the most intimate relations between the structural and plastic arts, and assumes that the highest sculpture is necessarily that which is most architectural in character. Hence the symmetry and rhythm of his work. Whilst his sculpture is highly decorative, he has so contrived to work with his architectural colleagues that it never appears as merely adjunctive but always as a homogeneous part of the actual structure. The great bronze doors of the Church of the Revelation at Saltsjöbaden and the four fine altar reliefs in the same edifice were done in coöperation with the architect Ferdinand Boberg. The same may be said of his four colossal groups, in black granite, each three and a half yards high, carved almost in the round and representing the development of trade during the thirteenth, fourteenth, fifteenth and nineteenth centuries from barter to world commerce. These surmount the fluted pillars of the façade of the Enskilda Bank in Stockholm, designed by Ivar Tengbom.

His plastic contributions to other buildings include the fine heraldic carving of the royal coat of arms in the centre of the façade of the Royal Dramatic Theatre at Stockholm, as well as two sitting and three standing figures of women and the vivid groups of dancing children on the bases of the columns of the loggia. This building, the work of Fredrik Lilljekvist, owes its distinction largely to the work of Milles and some few others, for by reason of injudicious selection of some of its decorations it is unable to occupy the artistic position destined for it.

Other architects with whom Carl Milles has associated are Nils Asplund, Sigfrid Erikson and Arvid Bjerke of Gothenberg.

The relation of sculpture to architecture is not simple. It forms a complex of considerable subtlety to which too little attention is paid nowadays by either archi-

rect or sculptor. In Gothic and Renaissance times the principles were understood and acted upon. Either in person or in a dual personality the architect and sculptor were one. It is rare to find this today; it is rarer still to find an acknowledgment of its necessity.

In a building there are two primary considerations—constructive and decorative—and there should be no building permitted

perversity that it should ever have been neglected or misconstrued.

In the first place, therefore, the intimacy of the relationship is maintained when the sculpture on a building (either outside or in), is identical with the structure in the form of a frieze, a capital, a pediment, a mural relief. Pheidias, Ictinus and Calliocrates saw to this in the Parthenon.

In the second place the intimacy of associ-



COURTS OUTSIDE THE STUDIO OF CARL MILLES, LIDINGÖ

CARL MILLES, SCULPTOR

EVERT MILLES, ARCHITECT

which is either without the other. The subtle function of sculpture is that, unlike mural painting, it is structural. Sculpture and architecture, therefore, are linked by a living chord; they are Siamese twins—both are plastic, both are glyptic; both are made out of clay and stone and wood and metal by chisel and moulding tool. Their proper relationship is so obvious that it seems a

ation requires to be respected and preserved. There is much sculpture (exterior and interior) which is as essentially a part of the architectural design as though it formed a part of the actual structure. It is accessory, but it is integral. Architecture is responsible for spaces as well as for places and the function of sculpture in this respect is no less important; rather is it more essen-

tial than in purely structural work. Hence, in the decorated plaza, square, court, garden, sculpture demands and supplies the main factors, for in such designs utility stands less in the way than in buildings. In the design of open spaces beauty, less than use, is the desideratum.

Carl Milles understands these two principles and while he has been able only to a limited extent to exercise his understanding on the first, on the second he has triumphed, for in the realization of his idea of the true surroundings of a great sculptor he has consistently kept in view the architectonic character of the essentials of the sculptural art.

And, in the third place, sculpture is essentially structural although it may not form part of a purely architectural plan of a place or space. Fountains and monuments and grave memorials are good only when they are in spirit and form constructive and fitted to the positions they occupy, for placement of a work of plastic or glyptic art is a function of architecture, the exercise of the faculty of relation. This Carl Milles also possesses and it has enabled his remarkable sculptural powers to function to the finest advantage. He has enriched European plastic art by at least ten of the continent's greatest monuments, and they are all in Sweden.

While engaged on the Sten Sture monument, Carl Milles was fabricating the memorial to the Swedish poet Franzén, in the working of which he exploited the native granite of the country in which so much of his future work was to be made. As to style, apart from his naturalistic animal studies and his portrait busts, nothing of his is more realistic than the two daughters of the poet, Selma and Fanny, who are seated at the base of this statue.

To the same period most of the great monuments belong, the Gustav Wasa and the Rudbeckius included. The former is exceptional in that it is carved in oak and painted, a great figure on a massive architectural base of granite and marble in the

Nordiska Museum at Stockholm. It is the most important essay in polychrome sculpture since Max Klinger's celebrated chryselephantine Beethoven in the Leipzig Museum; and, in addition to the colored oak, includes ivory, gold and silver. The coat of arms carved in the round on the mouldings of the base is an arresting feature of the architecture.

An architectural setting is also a pleasing feature of the statue of Johannes Rudbeckius, the seventeenth century theologian and founder of schools, who stands on a square base supported by four pillars and is placed outside the Cathedral of Vesterås, of which place he was bishop. His saying "I take off my hat only to God and the Sun" is illustrated by the sculptor in placing a putto holding a gold-rayed sun on the bishop's shoulder where he is seen whispering engagingly into the prelate's ear. The figure of bronze is three metres high and the base of marble and stone two metres.

Carl Milles on his return to Sweden realized two natural features which became of the utmost importance to his work and a spiritual feature no less potent. He discovered not only granite as the material most appropriate and most suitable for the Swedish climate, but the waters of his native country as an incentive no less potent than the myths of Scandinavia.

The waters, the lakes, streams and incursions of the sea pointed to fountains as the finest expression in form to which a plastic artist could aspire, and some of the finest fountains of modern times have resulted. Modern architecture has a few fine examples to show both on the American and the European continents and Carl Milles has added to the number.

The most important is the great Fountain of Industry in front of the Polytechnic at Stockholm, the Cerberus Fountain showing hunting dogs in relief, an immense bronze basin with a green patina raised on a base of polished granite. This fountain forms the centre of the details of the Monument



✓ CERBERUS FOUNTAIN (BRONZE AND GRANITE) OF THE MONUMENT
OF INDUSTRY, STOCKHOLM

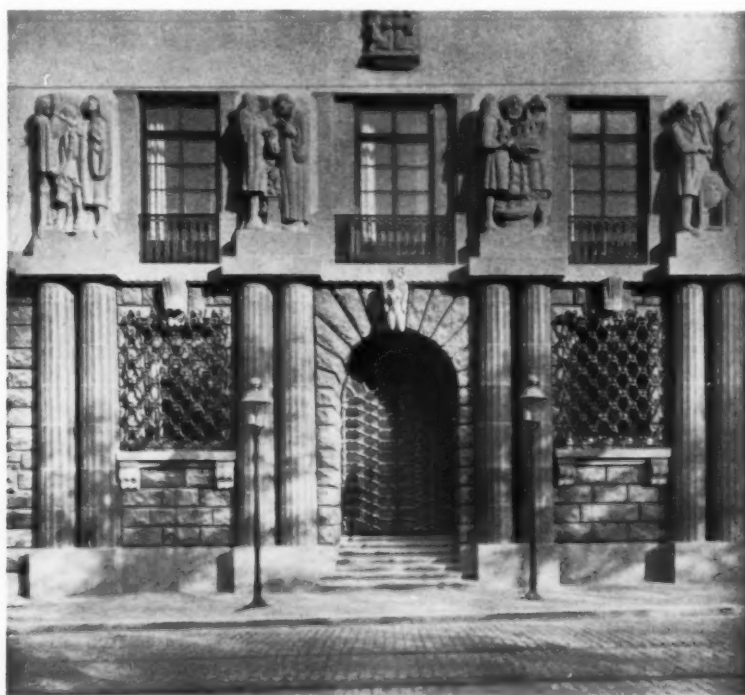


✓ THE GREAT FOUNTAIN, HOME OF CARL MILLES, LIDINGÖ, SWEDEN
CARL MILLES, SCULPTOR

of Industry, another prominent feature of which is the granite gateposts surmounted by carved hounds in granite, a metre and a half high.

In the market place of the town of Halmstad is the beautiful Europa fountain, the central group of which supplies a startling new version of the old myth form. But it is to the sculptor's own garden that a return must be made for the real charm of the fountain found here more intimately than in the public examples. Here the very spirit of living water is captured and here is the very

marriage of sculpture and architecture. Here the real design of the fountain may be studied, the design that includes the play of the waters. No fountain is complete unless it is at play. Here, too, the real style of the sculptor's work may be studied, for, left to please himself, he has allowed his imagination to be his only guide. The style is the man—composed, deliberate, sound in its traditions, not traditional but original, owing nothing to any individual or school of the past or of the present—genial, provocative, stimulating, compulsive.



CARVED FIGURE GROUPS IN BLACK GRANITE
ENSKILDA BANK, STOCKHOLM, SWEDEN

CARL MILLES, SCULPTOR
IVAR TENGBOM, ARCHITECT

ALLIED ARTS
AND
CRAFTSMANSHIP



PAVEMENT PANEL IN BRONZE, PRINCETON UNIVERSITY, N. J.
GAETANO CECERE, SCULPTOR
HELMLE & CORBETT, ARCHITECTS

Featuring
SCULPTURE
MURAL DECORATION
LANDSCAPE ARCHITECTURE
THE CRAFTS



NAIAD WITH FISH—IN GREEN BRONZE

STATUE ON THE TERRACE OF PILLARS, HOME OF CARL MILLES, LIDINGÖ

CARL MILLES, SCULPTOR



FOUNTAIN FIGURE IN GREEN BRONZE
A DETAIL OF THE GREAT FOUNTAIN, HOME OF CARL MILLES, LIDINGÖ
CARL MILLES, SCULPTOR

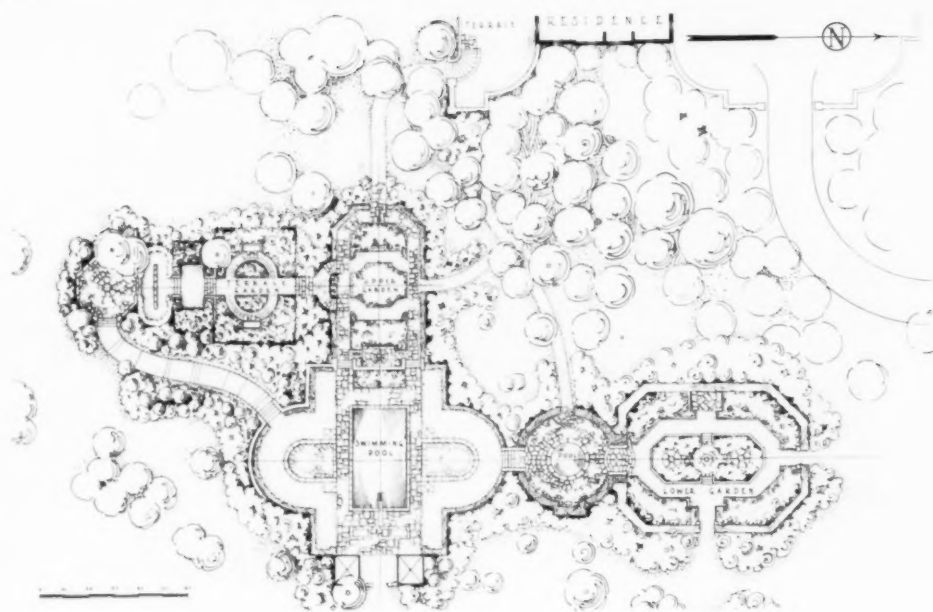


Photo. Tebbs & Knell

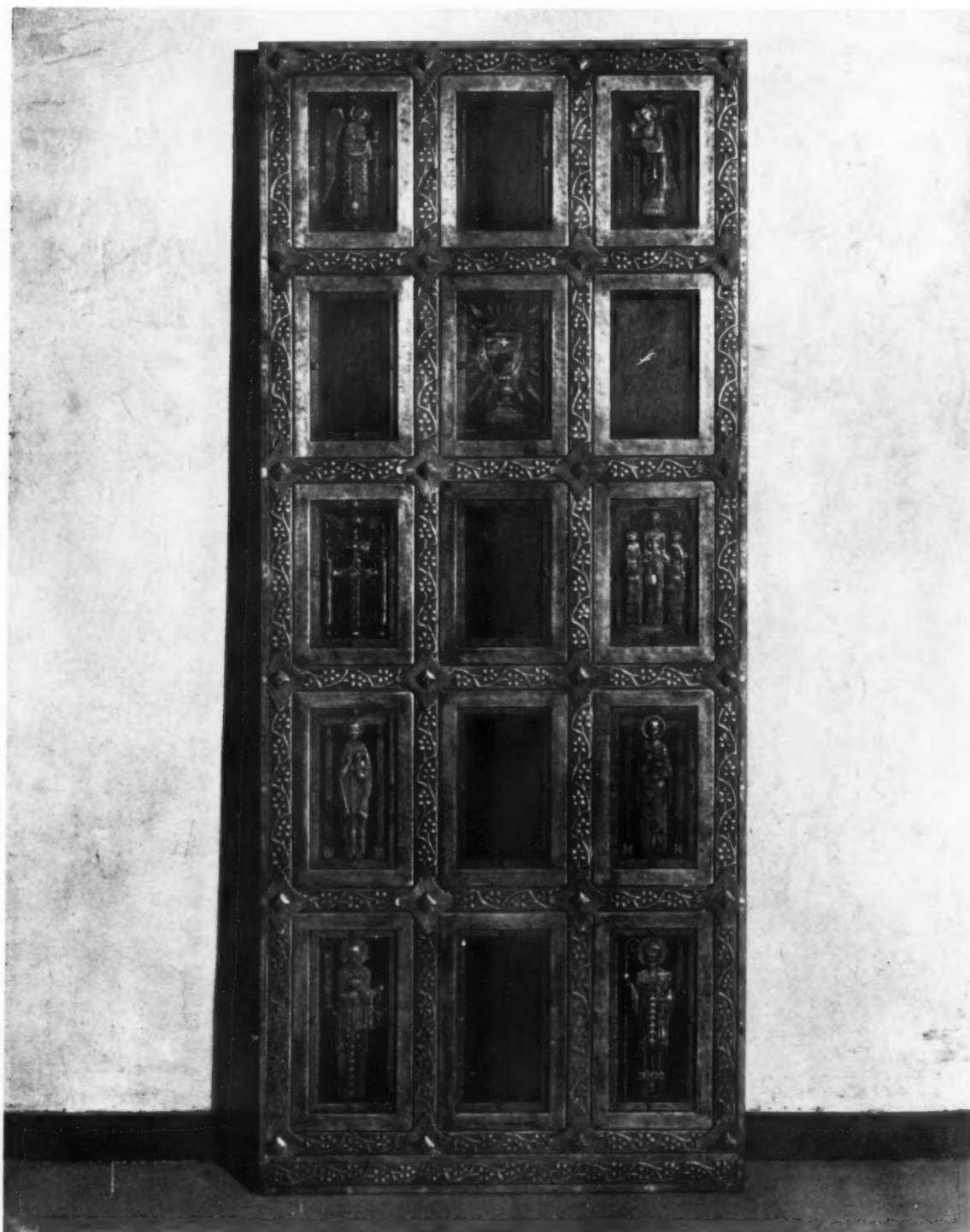
GARDENS OF THE RESIDENCE OF C. L. KING, ESQ., MANSFIELD, OHIO
WILLIAM PITKIN, JR. AND SEWARD H. MOTT, LANDSCAPE ARCHITECTS



Photo, Tebbs & Knell



GARDENS OF THE RESIDENCE OF C. L. KING, ESQ., MANSFIELD, OHIO
WILLIAM PITKIN, JR. AND SEWARD H. MOTT, LANDSCAPE ARCHITECTS



DOOR TO TREASURE ROOM, CHRIST CHURCH, CRANBROOK, MICHIGAN

OSCAR BACH, CRAFTSMAN

BERTRAM GROSVENOR GOODHUE ASSOCIATES, ARCHITECTS

(The repoussé steel panels are inlaid with gold and silver; the frame is of repoussé steel on heavy oak)

EARLY AMERICAN ARCHITECTURE AND THE ALLIED ARTS—A BIBLIOGRAPHY

*Supplement to the close of 1927**

BY RICHARD F. BACH

ACTIVE INTEREST in our formative architecture is now some forty years old; at least, that much may be assumed from dates of publications in the field. It has been a forty year period of ruthless destruction followed more or less suddenly by a largely unguided adulation, the former running amuck generally among the better buildings, while the latter fastened usually upon those less significant. During that time, and of course for scores of years before, men beheld Colonial and other early work without perceiving its merit; indeed, what merit could one ascribe to a McIntire house, a Savery highboy, or a Stiegel bottle in comparison with Franco-American Renaissance country residences, walnut *étagères*, brown stone fronts, Turkish cozy corners and wax flowers *en aspic*?

Slowly recognition came; as though the awakening which has made our architecture improve so rapidly in the last twenty years had brought also—and as a logical counterpart—a new reasonable interest in the work of the past on our own soil. And this is easily understood, for the study of records is one of the ways toward progress. It was not long before books and periodicals began to feed that interest. In fact, Early American titles now represent a regular feature in publishers' lists.

The result has been most beneficial. Many buildings have been preserved or restored; as have also many lesser items of furniture and other portable objects. With greater knowledge of the things themselves,

methods of preservation and restoration—the bugbear of the archæologist—have also improved. That alone is a prodigious gain. Museums and private collectors have been busy assembling material of Early American provenience; the American Wing at the Metropolitan Museum has had a record breaking attendance. The description Early American has been generally accepted as the best inclusive term covering our art from the beginnings through about 1825, embracing those of more limited meaning formerly used, such as Colonial, Georgian, Pioneer, Puritan, Early Republican, Federal, some of which now take their legitimate places as names of divisions—temporal or regional—of Early American art.

Throughout, this interest has become more and more thorough, appreciative and sensible; *schwärmerei* for the sentimental or the antique is gradually giving place everywhere to a sane regard growing out of an honest study of the material. Good things are separating themselves in the minds of the people from the mass of those that are merely old things. Incidentally there is now a flourishing and daily increasing trade in Early American antiques that formerly were only attic clutter; the capacity of attics, both then and now, has achieved eighth place among the wonders of the world, and the endless and indefatigable labor of Early American cabinet makers (and their modern helpers working in double shifts) is striving for the ninth.

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*In The Architectural Record, vol. 38, no. 2, Aug. 1915, page 281, to vol. 42, no. 3, Sept. 1917, p. 283, was published a series of reviews entitled: Books on Colonial Architecture; and in vol. 38, no. 3, Sept. 1915, p. 382, to vol. 42, no. 2, Aug. 1917, p. 185, was published: A Bibliography of the Literature of Colonial Architecture.

Both were brought to date as of the close of 1917, in vol. 44, no. 1, 2, July and August 1918, pp. 85-90, 175-80. The compilation entitled: Early American Architecture and the Allied Arts—A Bibliography, in March to July 1926, included all titles previously listed as well as all that appeared from Jan. 1918 to the close of 1925.

During a number of years it has been our plea, many times urged and as often though always passively agreed to, that our early architecture must be not only preserved, but above all recorded; for there are many reasons why one might not be able to preserve a building, but none against its measurement, study and publication. In fact, in these pages, as long ago as November 1917, appeared an article entitled: *The Final Record**, an extended argument in behalf of adequate documentation of the treasures of Early American architecture, from which we quote: By these three steps will the final record of Early American architecture come into being—cataloging existing Early American buildings; establishing a collection of books and other data on Early American architecture, placing this in some centrally located library of deposit and keeping it up to date; drawing up an ideal form of publication for instructive as well as comprehensive books on Early American architecture, encouraging the publication of others patterned after such adopted form.

Now, a decade later, this work has been begun, though still lacking an inclusive plan, the catalogue suggested, or an ideal form of volume. The beginnings made, in addition to any general interest evidenced by collectors, publications and an increased appreciation among laymen, are anchored to three separate and in their own lines highly significant undertakings. First, the Metropolitan Museum of Art opened (1924) an American Wing, a kind of text-book of Early American art with illustrations in three dimensions in the form of room arrangements ranging from 1640 to 1825, and at the same time undertook to make an inclusive record of Early American art both in its Library and in its Reference Collection of Photographs, all publicly available. Second, *The Architectural Record* published (March to July 1926) a complete

bibliography under the title: *Early American Architecture and the Allied Arts: A Bibliography*, covering all publications of interest in this field to the close of 1925 and which is brought to January 1, 1928, by the present article. Third, the American Institute of Architects has published a complete and authoritative photographic record of early work in Charleston, South Carolina. These three efforts we regard as fundamentally important and as contributing directly to the final record of our formative art, of which many chapters have yet to be written and of these not a few will be without illustrations unless the processes of photographing, measuring and drawing are pursued more diligently than at present is the case.

* * * * *

In the pages following are listed titles of books and periodical articles which have appeared in 1926 as well as some earlier items first discovered in that year. They are grouped in classifications exactly in accord with those used when the inclusive compilation was published (March to July 1926), and for convenience the skeleton of the scheme is presented again. In its earlier form the Bibliography listed certain general titles, as of series of measured drawings or of photographs; in view of the interest of the material these series have now been analyzed and individual items inserted in their proper rubrics, though their actual date of publication may antedate 1926. Again, several series have been added to during the year and for the sake of completeness such titles have been entered here again in their completed form, to render double reference unnecessary. From time to time, when subsequent addenda sections are published in these columns, a similar procedure will be followed; by this means the reader is assured of the completeness of the Bibliography. And by completeness we wish to imply not the absolute of a quantitative maximum of titles that might

*In *The Architectural Record*, vol. 42, no. 5, Nov. 1917, pp. 486-91.

be set down, but rather the relative of thoroughness as to the quality of titles that it has been found wise to include.

"A bibliography is somewhat like a ship under headway; equipped for service, supplied with needed materials and instruments to gauge speed and course, but unable to reach port without intelligent use of all these facilities. And in the running of the ship the master has at his command not only knowledge and purpose, but also imagination. The dangers which are not charted may be suspected and therefore the more easily conquered. And, finally, to do its work properly, the ship carries only essentials and each has its place. So in the

preparation of this Bibliography, the reader's imagination has been considered by the editor as an asset rendering his work more valuable. Cross references have not been resorted to, and he who is interested in Phyfe furniture will seek his quarry not only under furniture, but will remember that biography may also be a possible source. There is no field of human effort or interest which can dispense with imagination and succeed: bibliographies and their use are no exception. It will be the real test of value for these classifications if that quality, frequently requisitioned, serves to make out of dry rubrics of words and figures an instrument of current usefulness."

*In *The Architectural Record*, vol. 59, no. 3, Mar. 1926, p. 267.

✓ OUTLINE OF BIBLIOGRAPHY AND INDEX OF CLASSIFICATIONS

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|--|---|
| <p>I. GENERAL WORKS</p> <p>II. CHURCHES</p> <p>III. DWELLINGS</p> <ol style="list-style-type: none"> 1. General 2. New England States <ol style="list-style-type: none"> a. Region as a Whole b. Separate States or Groups of States c. Separate Cities, Localities or Individual Houses 3. Middle States <ol style="list-style-type: none"> a. Region as a Whole b. Separate States or Groups of States c. Separate Cities, Localities or Individual Houses 4. Southern States <ol style="list-style-type: none"> a. Region as a Whole b. Separate States or Groups of States c. Separate Cities, Localities or Individual Houses <p>IV. PUBLIC AND SECULAR BUILDINGS</p> <p>V. ALLIED (DECORATIVE, INDUSTRIAL) ARTS</p> <ol style="list-style-type: none"> 1. General 2. Furniture and Furnishings, Interiors, Woodwork 3. Glassware 4. Metalwork, Hardware, Lighting Fixtures 5. Pottery 6. Silver and Pewter 7. Textiles 8. Wall Papers and Wall Paintings | <p>VI. BIOGRAPHY</p> <p>VII. BIBLIOGRAPHY</p> <p>VIII. PERIODICALS</p> <ol style="list-style-type: none"> 1. General Articles (and articles on miscellaneous subjects not covered in sections following). 2. Churches 3. Dwellings <ol style="list-style-type: none"> a. New England States b. Middle States c. Southern States d. Central States 4. Public and Secular Buildings 5. Architectural Details <ol style="list-style-type: none"> a. Doors, Doorways, Fireplaces, Shutters, Stairways, Windows, etc. b. Fences, Brickwork, Stonework, etc. 6. Allied (Decorative, Industrial) Arts <ol style="list-style-type: none"> a. Furniture and Furnishings, Interiors, Woodwork b. Glassware c. Metalwork, Hardware, Lighting Fixtures d. Pottery e. Silver and Pewter f. Textiles g. Wall Papers and Wall Paintings h. Miscellaneous 7. Biography 8. Bibliography |
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I. GENERAL WORKS

(Including a few regional descriptive and historical)

DOW, GEORGE FRANCIS

Domestic Life in New England in the Seventeenth Century, a Discourse delivered in the Lecture Hall of The Metropolitan Museum of Art in New York City, it being one of a series to mark the Opening of the American Wing. Octavo; pp. 48, illus. Topsfield, Mass.; The Perkins Press; 1925.

METROPOLITAN MUSEUM OF ART, THE

Addresses on the Occasion of the Opening of the American Wing. Octavo; pp. 34. New York; The Metropolitan Museum of Art; 1925. \$5.00.

WATERS, THOMAS FRANKLIN

Ipswich in the Massachusetts Bay Colony. 2 vols.; pp. viii + 586, illus.; pp. x + 839, illus. Ipswich, Mass.; The Ipswich Historical Society; 1905, 1917.

WHITAKER, CHARLES HARRIS

The Octagon Library of Early American Architecture. Vol. 1—Charleston, South Carolina. New York; Press of The American Institute of Architects; 1927.

II. CHURCHES

FARIS, JOHN T.

Old Churches and Meeting Houses In and Around Philadelphia. Octavo; pp. xvi + 261, illus. Philadelphia; J. B. Lippincott Co.; 1926. \$6.00.

Report of the Committee on the Authenticity of the First Meeting House in Salem, together with the evidence. Pamphlet, pp. 85, illus. Reprint from the Historical Collections of the Essex Institute, vol. 39. Salem, Mass.

III. DWELLINGS

I. GENERAL

LATHROP, ELISE

Historic Houses of Early America. Octavo; illus. New York; Robert McBride & Co.; 1927. \$10.00.

MAJOR, HOWARD

Domestic Architecture of the Early American Republic: The Greek Revival. Large 8vo, pp. xxii + 237, illus. Philadelphia; J. B. Lippincott Co.; 1926.

2. NEW ENGLAND STATES

a. Region as a Whole

No additions

b. Separate States or Groups of States

No additions

c. Separate Cities, Localities or Individual Houses

KIMBALL, FISKE

Elias Hasket Derby Mansion in Salem. 8vo, pp. 20, illus. Salem, Mass.; The Essex Institute; 1924. \$1.25.

MIXER, KNOWLTON

Old Houses of New England. Octavo, pp. xx + 346, illus. New York; The Macmillan Co.; Price, \$5.00.

NORTHEND, MARY HARROD

Historic Doorways of Old Salem. 5 1/2 x 8 1/4 in., pp. xv + 96, illus. Boston; Houghton, Mifflin Co.; 1926. \$3.00.

3. MIDDLE STATES

a. Region as a Whole

No additions

b. Separate States or Groups of States

No additions

c. Separate Cities, Localities or Individual Houses

No additions

4. SOUTHERN STATES

a. Region as a Whole

DENMARK, ERNEST RAY

Architecture of the Old South, with a Foreword by Lewis E. Crook, Jr. Photographic plates illustrating the better work between 1640-1850. Illus. Atlanta, Ga.; Southern Architect and Building News; 1920.

b. Separate States or Groups of States

SALE, EDITH TUNIS

Interiors of Virginia Houses of Colonial Times, from the Beginnings of Virginia to the Revolution. Octavo; pp. xxxiii + 503, illus. Richmond, Va.; William Byrd Press; 1927.

c. Separate Cities, Localities or Individual Houses

CURTIS, ELIZABETH GIBBON; KIMBALL, MAXWELL; and HOLDEN, ARTHUR C.

Gateways and Doorways of Charleston, South Carolina, in the Eighteenth and the Nineteenth Centuries. Quarto; pp. xiii, frontisp. and 67 pl. New York; Architectural Book Publishing Co.; 1926.

SADLER, E. H.

Bloom of Monticello. Illus. Richmond, Va.; Whittet & Shepperson; 1920.

SIMONS, ALBERT and LAPHAM, SAMUEL, JR., editors

Charleston, South Carolina, with a Foreword by Samuel Gaillard Stoney. Quarto; pp. 219, illus. and meas. dwgs. Being vol. 1 of The Octagon Library of Early American Architecture, edited by Charles Harris Whitaker. New York; Press of The American Institute of Architects, 1927. \$20.00.

(To be continued in the next issue of The Record)

NOTES AND COMMENTS

CALIFORNIA BACKGROUNDS

As is common with people removed from metropolitan centers, Californians have in the past been more or less solicitous of the approbation of outsiders. Time was when we pointed with pride to things which were more our good fortune than our merit. I can myself remember when considerate "easterners" showed voluntary admiration for the climate and the scenery, and a willingness to be intrigued by the gold output and the size of turnips and oranges. I recall a college address delivered during my undergraduate days by some eastern university president or dignitary whom I have now forgotten. Yes, he said in substance, your sunshine is wonderful, and your flowers and your agricultural products and your Yosemite Valley and Lake Tahoe, and your timber and numerous other resources. And having thus worked us into a complacent enthusiasm for our vicarious virtues, he proceeded to ask, But what have you yourselves contributed? Given these physical bases for a distinctive culture, what are you doing to realize it?—Visitors were then not generally so frank.

Well, the gold output has ceased to interest even professional Californians. I believe that chambers of commerce and Californians Incorporated do not so much as refer to the "Golden State." We have also come to realize—even to admit—that in fruits and vegetables flavor is not necessarily commensurate with size. Interest in Yosemite Valley and Lake Tahoe is shifting; from objects of pride they are becoming sources of revenue, while those of us to whom nature offers literal re-creation pack further into the range to escape ukuleles and tips. Climate is still occasionally mentioned, though its field of exploitation has been moving from the center southward. In short, Californians are ceasing to expect admiration for their luck; and the significant thing is that along with this declining naïvete has been growing a recognizable cultural development.

Certain intellectual and artistic interests have long been manifest. From fairly early times until recent ones San Francisco enjoyed a theatrical reputation—not for production, but for discriminating taste. I have lately had the opportunity of hearing several actors and critics testify to the respect in which San Francisco's verdict was held. Several western literary figures have been decidedly more than local and ephemeral. The plastic arts, however, have been the latest to approach distinction and focus attention.

Architects first became aware that somebody was looking when the bungalow emerged. Don't ask me what is a bungalow or why. It is one of those

unscholarly subjects which can shatter a reputation for scholarship, like the origin and nature of jazz and the source of its name. The French are peculiarly fond of probing such questions. I look to some Gallic savant to give us a natural history of the bungalow which will make it seem like a really important matter. Meanwhile, whatever a bungalow is and however it came about, Californians and outside observers unite on its being an interesting contribution. At least it was until the speculative builders took it up. But to succumb to crass commercialism is no sign of weakness; the best things of life do.

If the bungalow was artistically a small beginning, it none the less set much more considerable forces moving. Here were outsiders concerned with something so simple and natural that it had not occurred to California architects to take it seriously, and neglecting our earnest efforts to conform to eastern standards. The inference was inescapable. Architects began attending to what was required rather than to what they imagined others might expect of them. This habit of independence has grown on California architects until now we are not bothered by what outsiders think of our work.

This statement may sound a little arrogant and hence misleading. There is a human approval for which we all have a weakness; or perhaps I should say a penchant, since within proper bounds it is really a commendable attitude. It is a satisfaction to think that our architecture is viewed with approval. But the important point is that we are not designing it with any presumed outside approval in view. Which, of course, is exactly one of the reasons why outsiders find it interesting. And which, again, is sufficient evidence that we have outlived our one-time provincialism. For this characteristic manifests itself not so much in the exhibition of local differences as in apprehension at exhibiting them. In other words, the essence of provincialism is the fear of being thought provincial.

When eastern architects profess interest in the work being done in California I am inclined to believe them. In the first place, were such not the case there appears to be no motive for their mentioning the subject at all. And in the second place, it is a pleasure to credit them with discernment. For, to be quite frank, I really think our current design is in large part among the best being done in the country today.

Just why this should have come about is of course an exceedingly complex matter, on some aspects of which I may have something to say in more detail

at another time. Suffice it to observe in passing that many of the laws supposed to determine these things with precision, and to which our histories cavalierly submit unprotesting past epochs, won't work now. Modern conditions modify much of their force, even supposing them ever to have had their alleged validity. Take the effects of local materials, for instance. It is practically as easy, sometimes easier, to get materials from the ends of the country, if not of the earth, as those existing nearby. Transportation and accidents of industrial development tend to that. There is therefore almost no section of the country which presents marked individuality in building materials. Compare social conditions in California with those of other parts of the country, and consider how much they really explain. The much-exploited effects of climate turn out to be more psychological than directly physical. And so on. No, the deterministic approach, unleavened by a little common sense and more imagination, will not yield much on California architecture. I am really inclined to believe that one of the principal reasons we are doing some of the most interesting architecture in the country is because some of the best architects in the country are in California.

IRVING F. MORROW

AN UNWISE REQUEST

THE DISTRICT OF COLUMBIA COMMISSIONERS request a temporary site upon the Mall for the farmers' market, ignoring the visible example of temporary buildings now destroying the utility and beauty of the Capital parks. The thought of adding a more unsightly object to their number is difficult to conceive.

The want of wisdom in requesting a park site for the objectionable structure, will be appreciated by a visit to the present market. On market days prominently in evidence are the unsightly portable stands, the dilapidated wagons, the forlorn horses and the scattered waste. The farmers leave upon the ground broken chicken coops, egg cases, decayed vegetables and debris of all kinds.

Instead of the stately buildings and formal parks of L'Enfant's plan we would have the farmers' market. Temporarily? We know and should not forget the long life of temporary buildings. When we celebrate the two hundredth anniversary of Washington's birth, citizens and foreigners will see flimsy stucco buildings and possibly a farmers' market upon the Mall instead of the order, dignity and beauty, which he with a broad vision contemplated.

Why do the District Commissioners make such an unwise request? The market must be removed to make way for the new Internal Revenue Building.

It is easier to put this place of barter with its unsightly accessories on the Mall than to select a permanent site. The District Committee in the House of Representatives has approved a site in the southwestern section of the city on the river where it will mar the connecting link between the War College and Potomac Park. The Efficiency Bureau strongly disapproved this location giving many good reasons for their action. The final selection of a permanent site must run the gauntlet of the House and Senate. With strong factions opposing each other it may be long before the question is definitely settled, hence the request for a place upon the Mall. The Commissioners with the possible failure to secure the Mall make a supplemental request for the use of B Street adjoining the park for portable stands and sheds with the Mall as a parking place for motor cars. As B Street borders the park and will be the main thoroughfare to the Memorial Bridge, it is unwise, being only less objectionable because they cannot make a temporary permanency in the street.

Let us recall briefly the flimsy structures placed on the Mall, under protest, as war emergencies. The frame stucco buildings between Third and Tenth Street not only destroy the beauty of the landscape, but bar the development of L'Enfant's plan, neglected for the past one hundred and thirty-nine years. These unsightly buildings preempt the ground where L'Enfant proposed his most imposing composition, the open vista between the Capitol and the Washington Monument, bordered by formal avenues of trees and stately buildings.

The most serious blunder perpetrated as a war measure are the reinforced concrete buildings erected by the War and Navy Departments on Potomac Park. These structures are good for at least a hundred years. They make futile the fine composition of the Park Commission which contemplated a densely wooded tract where these buildings thrust out their ugly prongs. Visitors to the shrines of our greatest Americans are distracted by their ugliness. Although their demolition is estimated at two million dollars, I believe the pride of the people in their Capital City and their reverence for Washington and Lincoln will insist upon their removal.

The temporary structures in Washington should be a warning not only to Government officials but to the city authorities of the country.

Roosevelt's breadth of thought and clear vision was illustrated when he ordered the destruction of the abandoned Pennsylvania Railroad station on the Mall, while Congress was preparing to wall in the train shed to fit it for Government offices. Although the House of Representatives went into hysterics over his supposed usurpation of power, investigation

proved he was acting within his rights. Had Roosevelt vacillated, the ugly train shed would have proved another barrier to park development.

The Institute as the guardian of the Park Commission plan should see that no permanent or temporary structures are erected in Washington that may hamper or prevent the speedy execution of the L'Enfant and Park Commission Plans.

The *Washington Post* in a forceful editorial says:

"The Mall belongs to the Nation. It has a more valid right to remain undefiled by ugly buildings than the farmers' market has a right to exist. If

Monroe, Michigan, at his resort project at Bitely, Michigan, after considerable experiment.

Mr. Greening has built five such cottages, which mark the attainment of perfection in log cottage construction. The logs used are second growth green white pine. He has these cut in the winter and peeled, leaving part of the cambium (inner) layer of bark. In the peeling process, by varying the shape and size of the cuts made through the cambium layer to the white wood below, many beautiful effects are secured.

After peeling, a coat of boiled linseed oil is applied



COTTAGE IN WHICH ALL LOGS AND POLES USED WERE TREATED WITH LINSEED OIL
Greening's Cottage, Bitely, Michigan

the Commissioners and Congress cannot find any other site for the market than the parkway that extends between the Capitol of the United States and the Washington Monument, let the market be abolished entirely. No backward step should be tolerated in the great work that is now under way for the beautification of the National Capital."

GLENN BROWN

TREATMENT OF LOGS FOR LOG CABINS

A NEW WAY of treating logs for the construction of log cottages has been adopted by Charles E. Greening, of the Greening Nursery Company,

with a paint brush to the logs. In a couple of weeks, another coat is given. When this coat is dry, the logs are ready for use. If the logs were not so treated, when they became dry the cambium layer would loosen and come off. The oil sets the bark so it remains on the log permanently. It also renders the logs impervious to water. This is a prime consideration. In the drying process, the oil retards checking to a large extent and if any small checks do appear, it makes them waterproof, thus preventing them from enlarging by the action of sun, water, and ice. The oil has still another use. It brings out the grain of the wood accentuating, in this way, the

contrast between the cambium bark and the wood.

Another innovation in Mr. Greening's method is the caulking between the logs with oakum instead of plaster. The oakum, being spongy, expands and fills the cracks when the logs shrink. In the case of plaster, when the shrinking comes it crumbles and falls out. The oakum can be stained the same color as the logs and coated with the linseed oil. This reduces shrinkage to the minimum.

The partitions in the cottages are constructed by a method of Mr. Greening's own that makes the cabins retain all their woodland savor. No sawed lumber is used at all. Pine poles of various sizes for the rafters, studding, etc., are used, and are treated the same as the wall logs. Those used in the partitions are sawed lengthwise in halves. The partitions are made of wall board in panels and the joints covered with these pine poles on both sides. The panels are painted in light colors and may be stenciled if desired. The use of wall board with the pine poles makes a simple and reasonable combination.

Trellises, pergolas, and other constructions are made of pine poles similarly treated, the whole giving the cottages the scent of the woods. By treating with the oil every second year, the cottages bid fair to survive the ravages of time better than most dwellings.

HARRY L. SPOONER

NEW HOUSING FOR OLD PARIS

A STREET in Paris was recently opened by the French triumvirate of authority—the Minister of Commerce, the Prefect of the Seine and the Prefect of Police. This street, according to the magazine "Housing," consists entirely of houses "built on the most approved principles of hygiene and on plans which recall some ultra-modern exposition of decorative art rather than the staid, uniform apartment houses of Paris.

"Situated in a district of Auteuil, which has retained its century-old trees and still boasts of many open spaces, the new street has been named rue Mallet-Stevens, after the distinguished French architect who designed this experiment in house construction.

"Seen from the outside the buildings present an entirely different aspect from those in the surrounding streets. Balconies, windows in rows and sloping roofs have disappeared. Stories are undefined, some being higher or lower than the adjoining ones. Windows are of huge size, and more like those

of some modern factory than of a private home.

"The walls are in gray cement, the roofs have been replaced by terraces, and every block presents a complicated geometrical figure of parallel straight lines, from which curves have been banished.

"The architect's idea was to make architecture subservient to comfort. The houses are, as it were, built from inside outward. When the rooms are large and airy, the windows are proportionately wide and high. But there is nothing hideous about these dwellings. The outer openings are painted in all colors blending harmoniously with the gray of the walls.

"The terraces are like hanging gardens, and on the sidewalks and window ledges there is a profusion of flowers and dwarf trees, which give the rue Mallet-Stevens the appearance of a street in some doll city.

"At first sight this new street of ten houses out in the Auteuil district looks like crazy geometric puzzles. It is all made of reinforced concrete, built in cubes and cylinders in the most fantastic manner.

"Enormous windows add to its queer very twentieth century look. It is only after the eye gets used to certain things that one begins to see elegance in the structure of these houses of the future.

"And once inside the houses of this queer street one realizes that the architect had some far better purpose than building an elegant frontage. He built his house from the inside out. He has tried to make a street of habitable dwellings, convenient, airy, full of light, easy to work in, comfortable and harmonious.

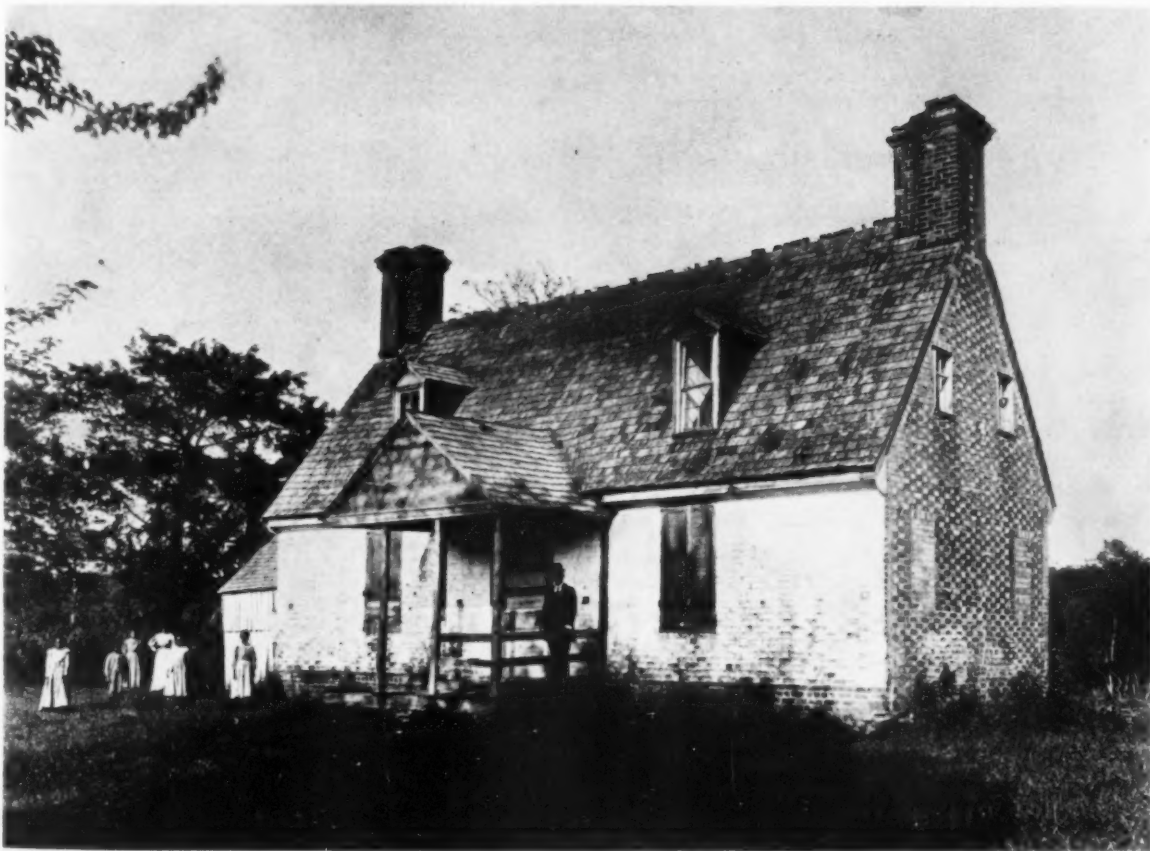
"The oddness of the outside does not appear at all indoors. The doors, windows and stairways are placed so as to give the maximum convenience. These houses are built for living in, just as an automobile is built for running on the road, and because they fit their purpose they are elegant. There is nothing superfluous.

"For the first time the flexibility of cement in place of stone as a construction material has been fully taken into account. Dwellers in these houses are not lodged in a square divided into more or less convenient parts. Around what they need in the way of living space a protective cover of cement has been built. Just as the house gives room for everything that is needed in a modern habitation, so it has no waste spaces.

"In only one thing does this street resemble every other street in Paris, and that is that there is nothing in it for rent."

MEASURED DRAWINGS

EARLY AMERICAN ARCHITECTURE

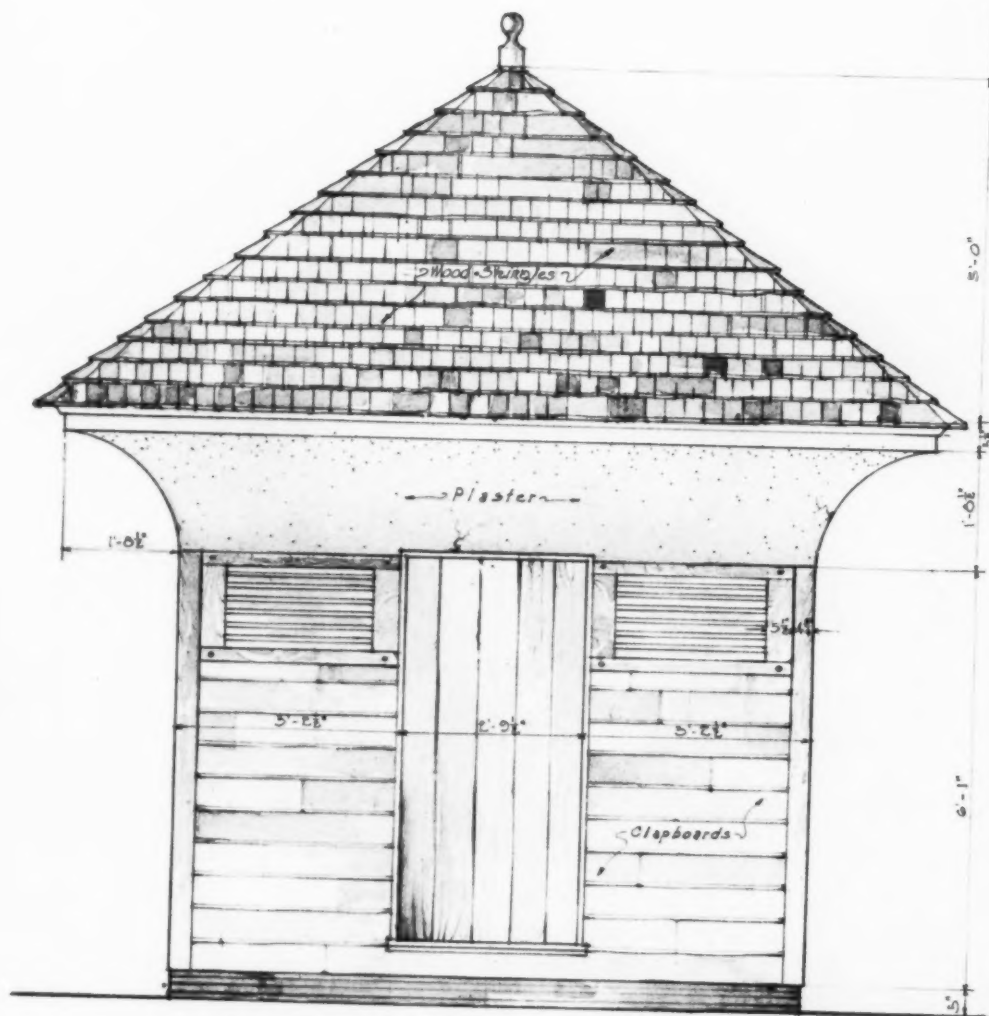


HOUSE NEAR WILLIAMSBURG, VIRGINIA



Photo, Metropolitan Engraving Co.

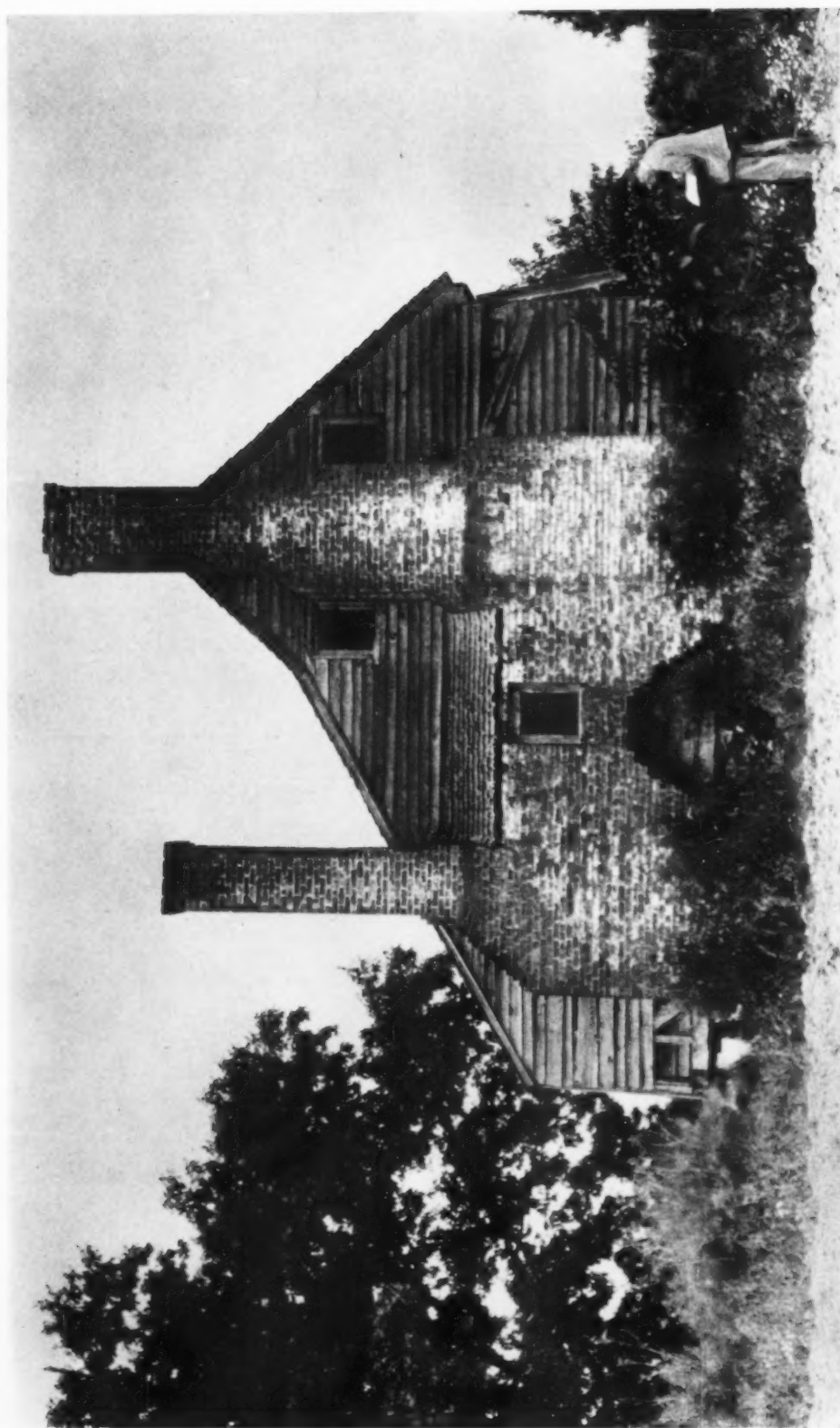
OLD DAIRY, WILLIAMSBURG, VIRGINIA



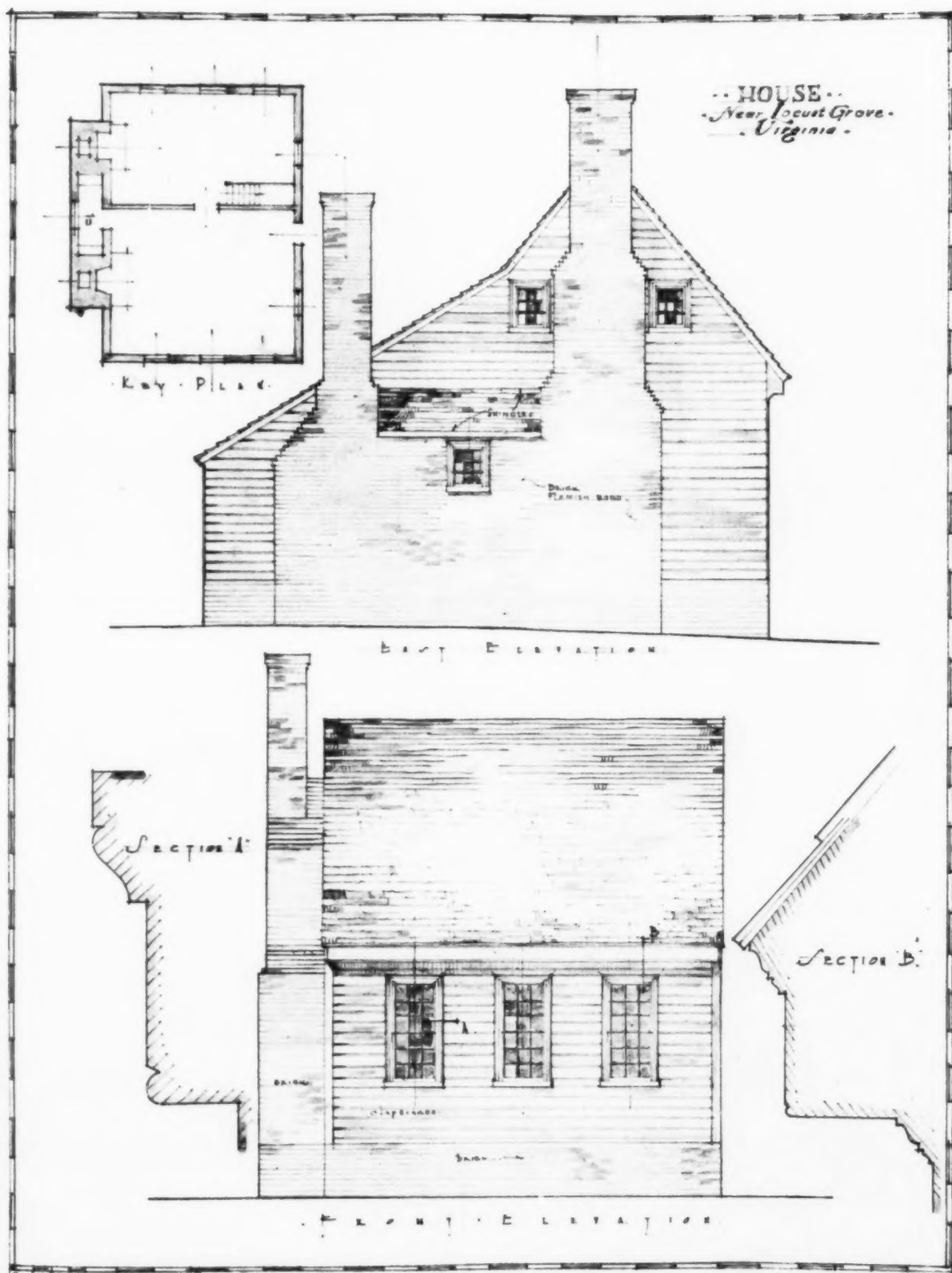
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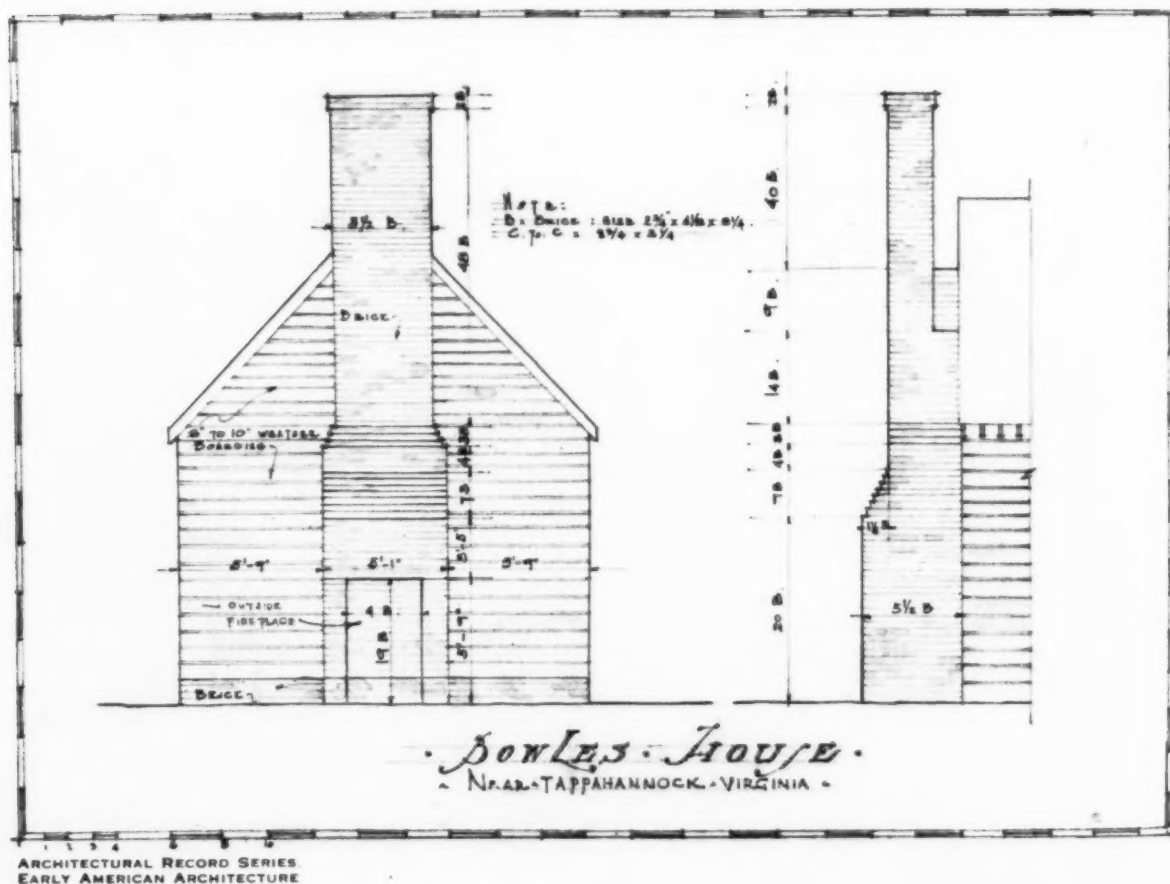
Measured & Drawn By
L.W. Ballou & F.C. Parker

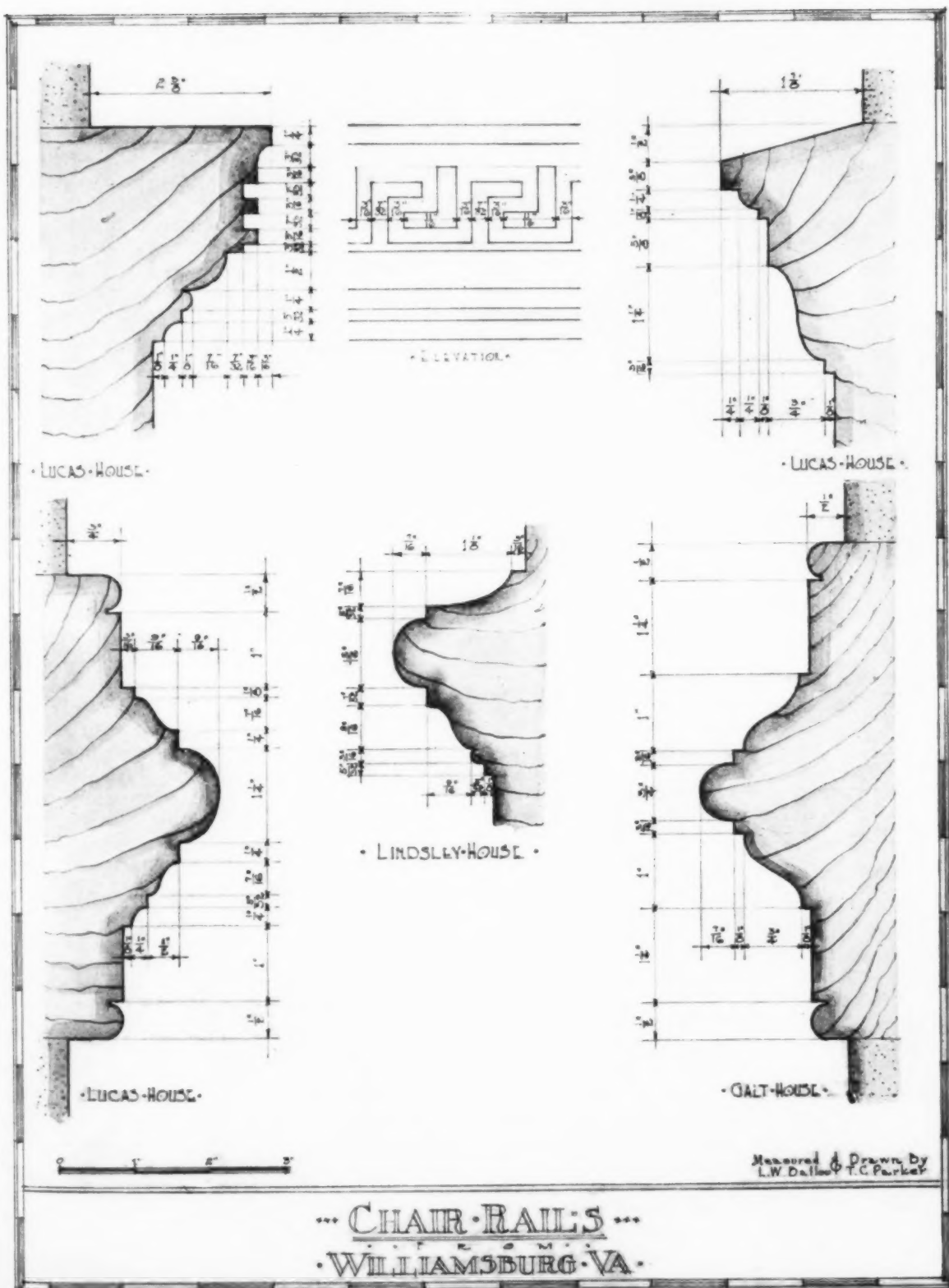
... OLD DAIRY
+ WILLIAMSBURG VA +

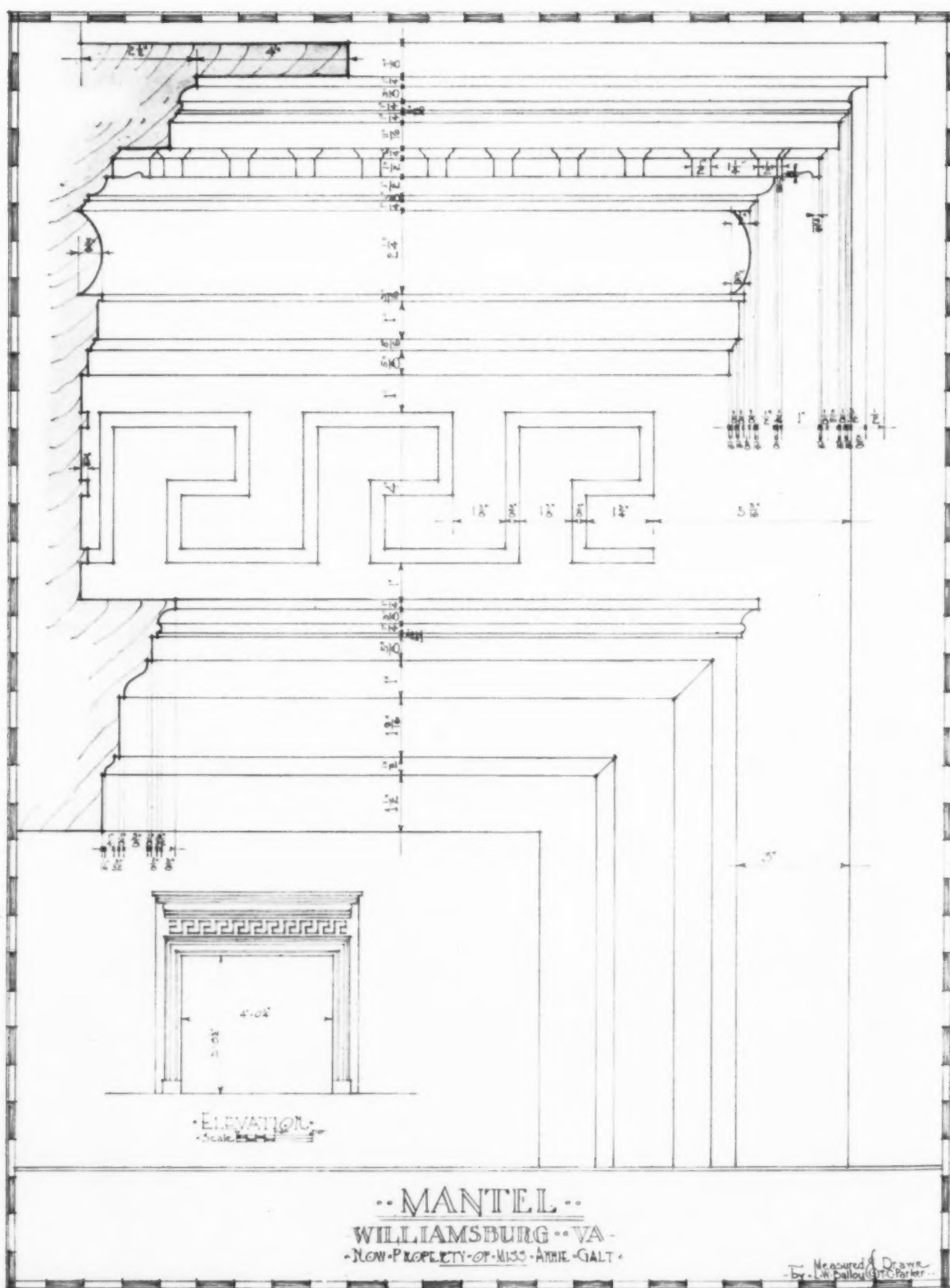


HOUSE NEAR LOCUST GROVE, VIRGINIA









THE ARCHITECT'S LIBRARY

MAJORCAN HOUSES AND GARDENS

BYNE, ARTHUR, AND MILDRED STAPLEY.

Majorcan Houses and Gardens. Folio. Helburn. 1928. \$25.00.

THE BYNE AND STAPLEY books are always intelligent. In many such collections of photographs, while the photographic work is as good, the selection of things photographed seems haphazard and miscellaneous; but Mr. Byne is an architect and a draughtsman, and his selections and drawings are made with knowledge, purpose and plan. The texts of such books too are apt to be meagre or perfunctory or verbose, and the texts of the Byne and Stapley books are admirable.

A generation ago the Balearic Islands were seldom visited or described, but now Majorca, the largest of them, has become almost a resort. It can be reached conveniently from either Barcelona or Marseilles, and has many foreign residents. Yet its character and appearance are unchanged. Palma, the capital, got its name from the victory of Cecilius Metellus over the Carthaginian in 123 B.C. It was taken by the Moors in the 8th century; again by the king of Aragon in the 13th century, and the land parcelled out among the conqueror's captains. On the basis of that military aristocracy arose a still more opulent aristocracy of commerce, with a flourishing trade with Italy and the Levant. The splendor of Palma in the 15th and 16th century was often remarked. The great families in the 17th century lived in an almost regal style, and a surprising amount of their sumptuous furnishings is still there, not in museums but as the ordinary accompaniment of family life.

Of Moorish architecture there is hardly a trace remaining outside of certain vaults and foundations in Palma. "The story of domestic architecture in Majorca begins with a sort of medieval fortified manor transplanted from Catalonia and adapted." Every knight who received a grant of land in the general division or "repartimiento" of the 13th century, was required to fortify his house. Majorca was peculiarly exposed to Moorish piratical attacks for centuries. This fortified Catalonian style was modified in the 16th century in Palma partly as the result of a conflagration, and in the rebuilding features less medieval, more Italian and renaissance, appear. Some country houses still retain medieval features, but the more interesting ones were built or remodeled in the 17th and 18th centuries. The last building period in Palma was 1650-1750 (pl. 152). The old patriarchal system was then breaking up. It was a ruinous *modus vivendi* when the families were enormous. Estates began to be divided, and small

lots were even sold to the peasants. Large holdings of the monasteries were put up for sale. The new homes were built in the island tradition. In general these country houses are simple and spacious, but the change from the cramped intricacy of the medieval seems to have been made without transition.

The designation of these country houses is a curious abbreviation. *Son Oleza*, *Son Berga*, *Son Fortuny*, means Oleza's house, etc. and *Son* is a contraction of *So es de En Oleza*, or This is of Mr. Oleza. A *son*, so to speak, is a gentleman's farmhouse as distinguished from a villa for recreation, or from the estate itself which is called a *possessio* or *predio*.

Water is scarce in Majorca, and that is one determining condition. The island is wild and rugged, and in the mountains a beautiful view is almost unavoidable. The problem was to harmonize the house to its setting and make the right approach. The solutions are of many kinds. One of them has rocks and fountains above the roof line, pool and pergola below the house; another on a leveled hill top has gigantic terraces and a wide flung road. While a Castilian country house is usually planted directly on the highway with its amenities inside in the patio, a Majorcan has an exterior composition of fruit trees and terrace. The gardens are usually small and simple without sculpture or polychrome tiles. Most houses are surrounded with a high balustraded platform, which in reality is a watershed to an underground cistern.

Gothic Majorca was built of stone, but the 17th and 18th centuries introduced rubble and stucco. The stucco is generally of a warm ochre tint, sometimes banded with sea-green and blue. The Majorcan patio is not an outdoor living room, as in Andalusia. In country houses it is the focus of the farm life (pl. 85); in Palma it serves as an approach to the main stair, and the architectural treatment is reserved for the stair and loggia. The arches are curiously flat (pl. 142 or 149).

Sixteen palaces and country houses are described separately in some detail. La Granja may be taken as an example of a country house (pl. 20, 21, or 23). The property passed from the Arabs to the Cistercian monks, then to the Vida family, and finally to the Fortuny family, who still hold it and who built most of the present house in the 17th century. It stands on a steep hillside, with a cascade behind of abundant water falling into a rock garden. There is a pool and pergola in front. Architecturally it is an important example. The façade is a composition of two towers and an arched gallery. The stucco is a soft ivory tone with pale green window trimmings, and the gallery is of a yellowish sandstone.

Majorca seems always to have had a vigorous local craftsmanship. Carpets were woven on the island, furniture carved and upholstered, friezes and dados painted by local artists. The Spanish window grille or *reja* is seldom found, but there is a wealth of iron balconies. Majorca glass rivaled that of Venice and Valencia. There is a peculiar island fabric called "catalufa," thick, shaggy, woven of raw silk and used for wall hangings (see pl. 178).

ARTHUR W. COLTON

HOW AMERICA BUILDS

NEUTRA, RICHARD J.

Wie Baut Amerika? 4to. 105 abb. 77 pp. Hoffmann. Stuttgart: 1927. Paper. \$2.50.

IN THIS BOOK Mr. Neutra, the Austrian aide of Frank Lloyd Wright in the building of the Imperial Hotel in Tokio, now an American architect practicing in the west, answers for German readers the interesting question, "How does America build?" Even were this all he did the book might have interest in America: for thus to have the new building methods of our time summarized and analyzed by a foreigner to whom European methods and our own are both familiar, brings before us many phases of these methods which we know too well to appreciate in full their implication. The very completeness with which Mr. Neutra omits consideration of traditional frame and masonry construction is highly significant. It is his claim that the super-personal style-formation now in development, originated in the United States, while some of the theoretical speculation was and is done abroad.

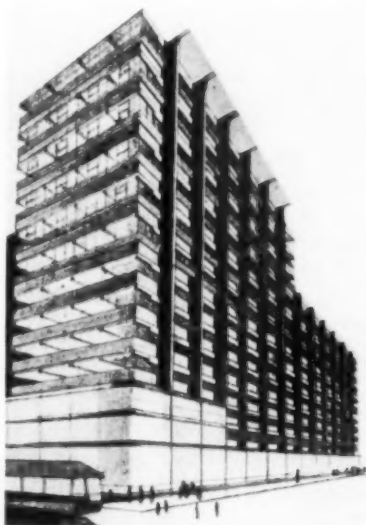
But Mr. Neutra goes further than his programme perhaps implies, and discusses the traffic question which is so closely related to the question of our building methods; and in this discussion he offers suggestions with regard to automobiles for handling both the matter of distribution and of garaging, and with regard to trains for railroad stations devoted to commuting traffic. His scheme for a large commuting station is interesting and ingenious both in plan and in design and his "Rush City" would be fortunate to be so well provided.

He further considers the relation between the almost universal use of taxis and private automobiles and the zoning question both as regards New York and Chicago; and proposes essentially a scheme

(such as neither New York nor Chicago approach, but rather Cleveland, Detroit or Hartford), with a business center of rather high buildings surrounded by a wide-spreading low building zone for residences, apartments and the necessary adjuncts, theatres and so forth, to large city life. Thus the first third of his book is of a theoretical but not utopian nature, outlining the conditions which control American building, how they are regulated and how they might well be further regulated to give to our cities something of the logical organism which, with somewhat less advanced traffic conditions, the newer Central European city planners have sought—as for example in the enlargement of Cologne or Vienna.

The central third of his book is devoted to a discussion in great detail of the new Palmer House in Chicago as a typical example of American large scale city building. This requires in America no particular comment since it is of conventional steel construction.

The concluding section is again, like the introduction, to a large extent theoretical and takes up various new methods of construction for use in small scale buildings. The first of these materials is a sort of standardized concrete plate (made in St. Louis) used on a reinforced concrete or steel skeleton: a method of building which one would associate rather with the experimentations of the Dessau Bauhaus in Germany than with America where wood and masonry traditions still seem all but universally dominant in such small scale construction as is considered "Architecture." This method is illustrated with plans and perspectives which are per-



From *Wie Baut Amerika?*

haps even more convincing from an artistic than from a structural point of view. One can only hope that such attractive modern designs are really practical and possible in the suburbs of "Rush City." The costs are said to compare favorably with those of conventional American wood construction. He also discusses the "Knitlock" system of reinforced construction used in the last few years by Frank Lloyd Wright in his California houses and already described by Andrew Rebori in *The Record*.

In conclusion Mr. Neutra discusses the aesthetic effect of the use of the materials and methods he advocates both in downtown "Rush City" and in its suburbs. He gives as well illustrations of technical details such as windows in skyscrapers, doors in garages, model kitchenettes and fitted

closets in apartments; and shows comparable treatment of such civic necessities and luxuries as covered market places, swimming baths, and jails. There is also a design of his own for the exterior of an office building which has the practical and artistic advantages of contemporary American factory design unobscured by masonry wall filling and cast ornament. Finally for the comfort of the retrospectively minded are a few illustrations of Pueblo architecture—today so universally admired—and an ingenious indication of the parallelism of its aesthetic with the aesthetic of the architecture of "Rush City."

Even in a brief notice the reviewer has felt it desirable in the interests of the American reader to summarize rather fully the unfamiliar material of the first and third sections of this very important book, which through its illustrations—which might have been larger and more frequent—asks only to speak for itself even to those who do not read German. Mr. Neutra shows himself here one of the less than half a dozen architects working in this country—all but Wright, of whom he is the only worthy follower, foreign-trained—who are as fully convinced as the leaders of French, German and Dutch architecture of the essential relation between modern design and the methods and materials it works with: with the architect of "Rush City" as with the architect of Pessac, of Dessau, or of Rotterdam, architecture is the aesthetic crystallization of the engineering solution of the building problem. Creation is again, as in the time of the great structural architectures of the past, a possibility, and nowhere more so than in America.

HENRY-RUSSELL HITCHCOCK, JR.

EXPRESSION IN CONCRETE

T. P. BENNETT, F.R.I.B.A.

Architectural Design in Concrete. Photographs compiled by F. R. Yerbury. Oxford Univ. Press, American Branch, New York. \$10.00.

IT is proper, in reviewing the text of this book, to consider the American section first. This is very fully illustrated by plates at the end of the book supplemented by a number of analytical studies. These plates have one feature in common—namely, an inadequate recognition of the claims of modern methods of concrete construction. In several magnificent examples which include a monumental archway, churches, hotels and temples, the constructive methods employed have been relegated to a place of secondary prominence while motives of enrichment, door and window incidence, and silhouette seem to have engaged the whole attention of the designers. That this is not the final word in the expression of concrete architecture in America one

is assured, and in this connection I cannot do better than quote Irving K. Pond, former President of The American Institute of Architects, and F. S. Onderdonk of the University of Michigan.

"We have, in this country, developed a wide variety of textures and surfaces," says Mr. Pond, "but we have in small measure as yet developed the constructional side as has been done in other lands, particularly in Germany and France. This is a field in which the structural imagination may well be allowed to play; a field in which our designers, with their material instinct for bigness and spiritual instinct for simplicity, should be eminently successful."

Professor Onderdonk says: "Although the new material has wonderful possibilities, the architects of our generation scarcely realize what a treasure has fallen into their hands. As all parts of a concrete building are tied together by steel reinforcing rods, joints as well as minor mouldings which separate bases, shafts and caps from each other in traditional styles are no longer necessary or desirable. Large smooth planes contrasting with openings piercing the concrete wall are the result; this must eventually result in the creation of a concrete tracery."

Both these authorities cover the theoretical field, yet I think I am right in saying that up to the moment of writing there are no examples extant in America of this approved practice.

If the statement near the end of the book is true, then the outlook for architecture is gloomy indeed. "The tendency of all industries," he says, "appears to be in the direction of the employment of a small number of skilled men and a large number of operatives who are unskilled or only slightly skilled." This means that the buildings of the future are to be produced by unintelligent people for the most part—i.e., people of slavish mentality. But, as I have said, certain of the author's deductions are difficult to accept. Personally, I believe that the architecture of the future will demand as the first requirement that everyone concerned shall be more than slightly skilled and shall be much more than slightly interested. Many—too many—of the buildings of the present time show evidence of the fact that they were produced by the methods advocated by the author. Is it too much to hope that the author may be wrong in his deduction?

Again, the fundamental differences between Roman and modern works are summarized for present-day construction as follows:

1. Greater economy of cost.
2. Reduction of period of erection.
3. Maximum amount of daylight in all rooms.
4. Reduction of number and extent of obstructions on plan.
5. Relatively low floor heights.

It would seem that these are not fundamental differences—they are secondary or even more remotely removed results. The fundamental differences in the matter are the combined use of steel and concrete, the exact knowledge of the properties of this combination, and the scientific application of this knowledge to the constructional problems of modern work. The author attributes lack of mathematical knowledge to early historical construction (be it noted that mathematics is only a humble handmaid of science) and hints that he will further investigate the difference mentioned above numerically, but one is disappointed by being confronted next by the annunciation of the principle of using one material as a constructional element and covering it with another. One would have expected the author at this point to indicate at least the basic fact underlying the matter, which is the tensional property of Ferro-concrete, but there is no reference to it.

In the opening chapter "originality" is referred to as an expression of individuality, and individuality is in all arts a contemporary characteristic. If this be true, then Louis Quinze and Strawberry Hill Gothic horrors are both original and individual. And so they may be—but with vicious, modish frippery at the heart of them. Originality and individuality of worth come only from the sincerity of purpose of the designer. It is difficult to avoid complete dissension from the author in regard to many things in this book, but in none more so than in his deduction that touches upon constructional expression.

The author produces for the expression of modern architecture "the dominating idea of verticality" and produces it as the result of constructive impulse. Let it be stated as a simple fact that the true expression of modern architecture is no more dominantly vertical than horizontal—rather less so, in fact. The example taken to illustrate the dominating idea of verticality is very far from

being conclusive proof of the author's hypothesis. Page 8, paragraph 1, runs as follows: "The main vertical constructive element is repeated as a number of bays on the façade, and a suitable lighting element is obtained by dividing these bays with suitable vertical features." But on turning to the illustration which is to bear out this assumption (plate XL showing the Hollywood Terminal Building) we find there is scarcely a sign of the repeated vertical constructional element referred to, and no sign at all of the horizontal element which everyone knows to be there, and which in actual fact dominates the whole

hidden skeleton. It is only necessary to consider the amount of steel laid horizontally in a modern building with the amount fixed vertically to arrive at a just estimate of what is the dominating idea.

Messrs. Morgan and Walls and Clements, the architects of the building in question, were entitled to make their design as vertical in expression as they liked, but I do not think the author is justified in attributing to it a mediaeval modernism which does not exist and which should not exist.

In the present transitional state of architecture, I think it is regrettable that the author of this book did not make the following distinction clearly and emphatically, for it is one that is intimately bound up with the development of concrete architecture, and it is this:

Concrete construction is one thing—ancient—chiefly compressional.

Ferro-concrete construction is another—modern—chiefly tensional.

In a book which sets out to review the whole field of "architectural design in concrete" the omission of such a vital distinction and the emphasis of it is a grave defect. Heretofore, tensional forces in a building were considered to be disastrous agents leading straight to disruption. Now we can lock them up with the complete assurance of continually increasing safety. This means that we have the astounding



RADIO TOWER, KOOTWYK, HOLLAND

J. M. LUTHMANN, ARCHITECT

From *Architectural Design In Concrete*

phenomena of a new constructive material to our hand that only awaits scientific application to modern architectural problems, and as yet we have practically no new architecture. A casual glance at history will show conclusively that a new architecture invariably comes with a new constructive material and here we are with practically none.

Let me conclude with the following extract—page 24, last paragraph—"It is therefore of the greatest possible importance that at frequent intervals a survey should be made of the efforts of the individual designer to produce façades, interiors, color com-

sitions, textures and ornament which represent his personal ideas." This is the author's own summary of his intention in publishing the book called "Architectural Design in Concrete." Façades, interiors, color, textures and ornament, but very little about the great new constructional principles which have in their heart the source of inspiration of all the noble works of the future. It would almost seem that the root of the matter is not of prime importance to the author and one is forced to say in conclusion that the book is chiefly an excellent collection of plates.
S. WOODS HILL.

LIST OF NEW BOOKS ON ARCHITECTURE AND THE ALLIED ARTS

COMPILED BY
PAULINE V. FULLERTON
LIBRARIAN IN CHARGE OF THE DIVISION OF ART AND
ARCHITECTURE, THE NEW YORK PUBLIC LIBRARY

ARCHITECTURE

ARCHITECTURAL LEAGUE OF NEW YORK.

Yearbook and Catalogue of the Forty-Third Annual Exhibition. Building of the American Fine Arts Society, February fourth to March fourth, inclusive. New York: Press of the Kalkhoff Company, 1928. 82 unnumbered leaves, illustrations. f°. \$1.50. 720.6

An annual record of important work in the field of architecture, crafts, sculpture and decorative painting.

Cafés, Bars, Restaurants.

Paris: Construction moderne, 1927. 2 plans, 38 plates. obl. 4°. 75 fr. 725.71

A collection of photographs showing both exteriors and interiors of Parisian cafés and restaurants, arranged alphabetically under architects.

HARRISON, FREDERICK.

York Minster. London: Methuen & Co., Ltd., 1927. xii, 212 p. Front., plans, plates, 12°. 6s. 726.6

Bibliography, p. 204-205.

A study of the history and architecture of this English cathedral by its vicar-choral and librarian. Small half-tone illustrations from photographs.

KEYSER, CHARLES EDWARD.

A list of Norman tympana and lintels with figure or symbolical sculpture still or till recently existing in the churches of Great Britain. 2d ed. rev. and enl. London: Elliot Stock, 1927. lxxxiv, 80 p. Front., plates. 4°. 35s. 729

A long and detailed introduction reviews the literature of the subject, discusses the dating of examples, and describes the sculptured ornament. The catalogue lists individual examples alphabetically by location. There are, in addition, a topographical classification; indexes of illustrations, of subjects and of places, with a list of photographers.

MARÇAIS, GEORGES.

Manuel d'Art Musulman; l'Architecture Tunisie, Algérie, Maroc, Espagne, Sicile. Paris: A. Picard, 1926-27. 2 v. Diagr., illus. (incl. map, plans). 8°. 100 fr. 723.3

Bibliography, p. 421-441 and 917-929.

A chronological and a regional study of the architecture of the western Muhammedan world.

MIXER, KNOWLTON.

Old Houses of New England. New York: Macmillan Co., 1927. xx, 346 p. Front., illus. 8°. \$5.00. 728

A discussion of typical examples of the early domestic architecture of New England in relation to the historical background of the period.

POLEY, ARTHUR F. E.

St. Paul's Cathedral, London; measured, drawn and described by Arthur F. E. Poley. London: Printed for the author, 1927. xvi, 29, vii p. Front., illus., 32 pl. 1 ed. f°. 6 guineas. 726.6

At head of title: Erected 1675-1710.

Printed at the Chiswick Press.

"Mr. Poley's beautiful drawings of St. Paul's represent several years of devoted labour and the result is worthy of the splendid building which forms their subject. For the first time, there will be available for students of architecture an accurate and complete record of what is, on the whole, the finest example of neo-classical architecture in existence."—Introduction by Sir Reginald Blomfield.

POWER, ETHEL B.

The Smaller American House; fifty-five houses of the less expensive type selected from the recent work of architects in all parts of the country. Boston: Little, Brown & Co., 1927. x, 100 p. Illus. (incl. plans). 4°. \$3.00. 728

A volume of illustrations from photographs, with brief descriptive captions, grouped according to the building material employed. There is an index of architects and of owners.

REQUA, RICHARD S.

Architectural Details, Spain and the Mediterranean. Cleveland, Ohio: J. H. Jansen, 1927. 4 l. 144 pl. f°. \$20.00. 729

"The securing of the photographs and half-toned reproductions contained in this work were made possible through the co-operation of the Monolith Portland Cement Company of Los Angeles, California.

By special arrangement with them this edition was published."

Excellent reproductions from photographs illustrating characteristic examples of façades, doorways, grilles, balconies, roofs, towers, courts and garden details.

WALTERS, SIR JOHN TUDOR.

The Building of Twelve Thousand Houses, Illustrated.

London: E. Benn, Ltd., 1927. xi, 38 p. Front., 98 pl. (incl. plans), port. 4°. 21s. 728

An English solution, by the Industrial Housing Association, of the housing shortage in certain colliery districts. Fully illustrated by plans and drawings.

ALLIED ARTS

BAYARD, EMILE.

L'art de Reconnaître les Tapisseries. Paris: E. Gründ, 1927. 342 p. Illus. 12°. (Guides pratiques de l'amateur et du collectionneur d'art.) 18 fr. 745

A compendium of information concerning tapestry, its types, history, marks, care, etc.

BORENIUS, TANCRED, and E. W. TRISTRAM.

English Medieval Painting. Firenze: Pantheon, 1927. 66 p. Illus., 101 pl. f°. £4 14s 6d. 759-2

Bibliography, p. 58-61.

A chronological study covering the twelfth through the early sixteenth century, with a special chapter on technique. Wall paintings and panel pictures are reproduced in drawings and water colors by Professor Tristram.

BOSSERT, HELMUTH THEODOR.

Peasant Art in Europe: 100 plates in full colours and 32 plates in black and white, reproducing twenty-one hundred examples of peasant ornament and handicraft taken directly from unpublished originals. London: E. Benn, Ltd., 1927. 95 p. 132 mounted pl. (mainly col'd). f°. £9 9s. American edition published by Weyhe at \$50.00. 740

Bibliography, p. 41-44.

FOREIGN PERIODICALS

Reviewed by Henry-Russell Hitchcock, Jr.

THE PERIODICALS here reviewed give a more consistent and intelligible picture of current architecture than did the varied lot of last month. For the present it would seem that the German architects (with Schneider the furthest to the left, and Kaufmann the furthest to the right), have the most definite and mutually understandable programme. The tendency of the more important German periodicals to devote practically an entire number in plates and text to one architect or group of related architects, certainly gives the foreigner a better idea of the dominant style than the more casually chosen material in the other European journals. *Die Baukunst* in this month's number devoted to Tessemow, and *Moderne Bauformen* devoted to the work of the Vienna architects, offer a most satisfactory picture of the typical work of architects who are neither reactionary nor

An excellent collection of decorative motives, very completely indexed.

COOPER, C. S.

The Outdoor Monuments of London: statues, memorial buildings, tablets and war memorials; illustrated from photographs specially taken by Will F. Taylor. London: The Homeland Assoc., Ltd., 1928. viii, 236 p. Front., plates. 4°. 18s. 735

"The present volume is an attempt at cataloguing and recording London's statues of famous men and women, its war memorials, and the commemorative tablets placed upon buildings and sites of historical interest."

—Preface. There is an index of sculptors and architects.

Decoration in Colour.

100 modern interiors in colour. Stuttgart: J. Hoffmann, 1927. vi p. 100 col'd plates. 4°. English edition by Batsford, price 38s. Title of German edition *Farbige Raumkunst*, price 38 marks. 747

Austrian and German examples showing interior detail, color combinations, furniture and accessories.

SITWELL, SACHEVERELL.

German Baroque Art. London: Duckworth, 1927. 109 p. Col'd front., 48 pl. 4°. 25s. 709-43

Printed by the Riverside Press, Edinburgh.

Bibliography, p. 103-108.

The author's point of approach is indicated by the three divisions of the volume: the historical scene; an architectural tour; and an epitome of painters and craftsmen.

WEBBER, F. R.

Church Symbolism; an explanation of the more important symbols of the Old and New Testament, the primitive, the mediaeval and the modern church. Introduction by Ralph Adams Cram. Cleveland: J. H. Jansen, 1927. 4 p., ix, 3 95 p. Front., illus. 4°. \$7.50. 726

Bibliography, p. 371-376.

A detailed explanation of various symbols, illustrated by drawings and half-tones with glossary and index.

revolutionary in their programme—the architectural center, so to speak, to which most of the civic work in the other periodicals belongs.

The British periodicals show, amid a mass of reminiscent work, little that is different in spirit from the majority of work on a similar scale produced in America. There are, to be sure, one or two houses in which the continuance of tradition seems less binding than with us, with more of simplicity and less negative in quality. It is also significant that the very completely modern house by the well known and long established firm of Sir John Burnet and Partners compares very favourably with the most advanced French, Dutch and German work. The plan however is closer to the American norm.

ENGLAND:

The Architects' Journal. January 18. A housing development at Weybridge by Louis de Soissons and Arthur W. Kenyon. Some rejected designs



HOUSE IN ESSEX BY SIR JOHN BURNET AND PARTNERS
From *The Architect and Building News*, Feb. 17, 1928

for the Shakespeare Memorial Theatre.

Feb. 1. Second installment of Nathaniel Lloyd's article on brick sizes. An article by P. Morton Shand based on a lecture by André Lurçat on the "Aims and Inspirations of Modern Architecture."

Feb. 8. A well illustrated article on Birchanger, Northwood, a fine conservative modern English house. Measured drawings of a Regency interior.

Feb. 15. Mosaic decorations by Boris Anrep in the chapel at Keir, Dunblane, Scotland.

Feb. 22. A mildly modern building in Paisley.

The Architect and Building News.

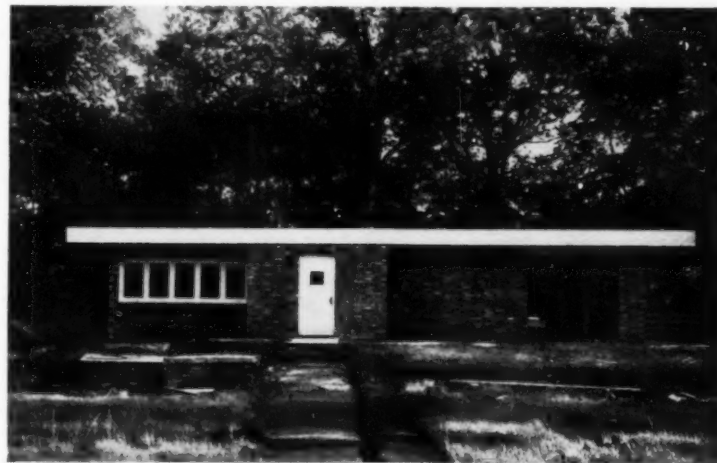
Jan. 6. An article on Sir Edwin Lutyens' designs for the British Embassy in Washington. A complete publication of the winning designs of Elizabeth Scott for the Shakespeare Memorial Theatre; also four rejected designs of which two are American. The interiors of the *Ile-de-France*. A very excellent traditional house near Oxford. An illustrated account of the "Trend of Architectural Ornament" in England. Some excellent remodeling. A London factory.

Jan. 13. Recent London County Council Housing Progress. German theatres by Oskar Kaufmann.* Modern design for a Covered Market.

*Illustrated in these pages.



HOUSING IN JÜLICH, RHINELAND
From *Zentralblatt der Bauverwaltung*,
Feb. 8, 1928



A SUMMER HOUSE DESIGNED BY KARL SCHNEIDER
From *Bauwelt*, Feb. 23, 1928

Jan. 20. "Architecture and Thomas Hardy." An article on the Rue Mallet-Stevens in Paris. New factory, Sidcup, for Crittall Metal Windows.

Jan. 27. "England, France and the Ultra-Moderns" with illustrations of Boston work by Strickland, Blodgett and Law.

Feb. 3. An article on the Danish Architect Kay Fisker, a leading neo-classicist. A note on the *Daily Mail* "House of the Future." An Exhibition of Modernist Furniture at Shoolbred's.

Feb. 10. The spandrel sculptures of the southeast transept of Worcester. De Byenkorf, a modern Dutch Department Store of P. Kramer, architect.

Feb. 17. A very fine completely modern house of Sir John Burnet and Partners.*

Journal of the Royal Institute of British Architects. Feb. 11. A verbatim report of a discussion of Harvey W. Corbett's talk on skyscrapers.

FRANCE:

La Construction Moderne. Feb. 12. Restoration of the Cathedral of Soissons. E. Brunet, architect.

SWITZERLAND:

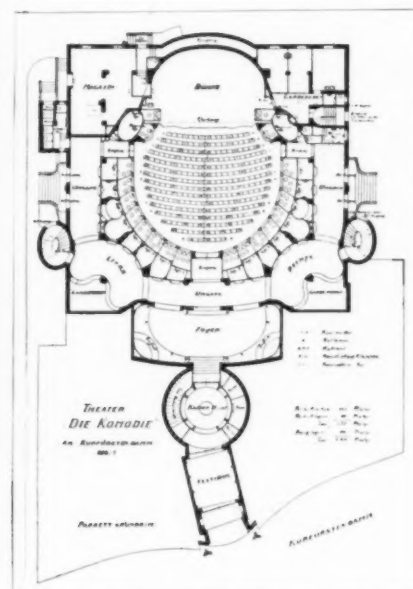
Das Werk. Feb. Article on Modern Kitchen arrangements. Modern architecture at Jerusalem.

ARGENTINA:

Revista de Arquitectura. Feb. A modern bank in Buenos Aires and



THEATER, DIE KOMÖDIE, BERLIN, BY OSKAR KAUFMANN
From *Die Kunst*, Feb., 1928



From *The Architect and Building News*,
Jan. 13, 1928

a modern house, both by Alejandro Virasoro.
CANADA:

Jan. *The Journal*, Royal Architectural Institute of Canada. An editorial on the problem of the skyscraper. An early nineteenth century house at Stamford, Ontario.

GERMANY:

Moderne Bauformen. Feb. The number is devoted to work by Vienna Architects, Strnad, Hoffmann, and others. Interiors and students' work is included. Standardized modern interior and exterior doors from Frankfurt am Main.

Die Kunst. Feb. An article on American Country Houses. Die Komödie theatre by Oskar Kaufmann.* Modern Architecture and the League of Nations Competition: the Fahrenkamp and the Le Corbusier design.

Baukunst. Jan. A full study of the work of H. Tessemow; including his installation of the Dresden Art Exposition of 1925.*

Die Baugilde. No. 2, 1928. Competition Drawings for the Solingen High School.

No. 3, 1928. A Theatre in Essen by Metzendorf and Schneider. A Berlin cinema by Schöffler, Schlönbach and Jacobi. Competition drawings for the Reichstag building extension, Berlin.

Bauwelt. Feb. 23. A discussion of modern architecture, between an architect, a sculptor, and a painter. Works of Tessemow and Schneider.*

Zentralblatt der Bauverwaltung. Feb. 1. Competition Drawings, Reichstag Building addition.

*Illustrated in these pages.

Feb. 8. Workers' apartments in the Rhineland; Architect, Martin Kiessling.*



INTERNATIONAL EXHIBITION, DRESDEN, 1925
From *Baukunst*, Jan., 1928



Residence of Arthur Lawrence, Esq., Bronxville, N. Y.
Penrose V. Stout, architect.
Roof of slate from the O'Brien Bros. Vermont quarries.

WE BELIEVE that unusual interest will be felt by architects in one of the most pleasing of the products of our Vermont quarries—our

***Emerald Dark
Unfading Green Slate.***

This roofing slate, split to three-sixteenths thickness, affords a most charming combination of tint and texture, adaptable as regards color to virtually any type of residential architecture and absolutely non-fading under all circumstances. It has been used to extraordinarily good effect in some of the most interesting of modern residential work, and we ask your consideration for it on your next undertaking of this type.

See Sweet's for details—page A458

O'BRIEN BROS. SLATE CO., INC.
GRANVILLE, NEW YORK

NOTES IN BRIEF

TRAVELING EXHIBITS

The Portland Cement Association announces the following information regarding a traveling exhibit of prize-winning designs in the T-Square Club Competition for duplex and semi-detached houses of concrete masonry.

"The photos sent out have been enlarged to 15x20 and mounted on heavy board backing suitable for display. There are eleven drawings in the set and they will be shipped by express, charges prepaid, to any architectural club or chapter of the A. I. A. interested in the same. Shipment will be made in a suitable container to prevent the photos from being damaged in transit and a description of the drawings will accompany the exhibit.

The T-Square Competition was conducted, first—for the purpose of obtaining competent architectural studies in the design of semi-detached and duplex houses of concrete masonry. Then it was the hope that attention would be brought to the distinctive possibilities of concrete as an economical structural medium."

Clubs wishing to obtain these drawings as an exhibit should write to W. F. Lockhardt, District Structural Engineer, Portland Cement Association, 347 Madison Avenue, New York City.

CHICAGO FAIR—1933

The Architectural Commission for the world's fair of 1933 has been determined. It consists of Raymond Hood, Paul Cret, Harvey Corbett, William Holabird, Edward H. Bennett, Hubert Burnham, Arthur Brown and Ralph T. Walker.

It is tentatively proposed to locate the group of exposition buildings on a chain of islands built and to be built in the lake between Jackson Park and Grant Park.

The membership of the Committee promises a fair that will have little resemblance to classical Greece or Rome but rather an exposition of the arts, construction and thought of our own times.

INTERNATIONAL EXPOSITION IN SEVILLE

Ceramic decoration which has been cultivated bril-

liantly and continuously in Spain from the early prehistoric times, will be one of the notable features wrought into the fabric of the Ibero-American International Exposition in Seville which is to be formally opened on Columbus Day, October 12th, to continue through June, 1929, and in which the United States will officially participate.

A novel feature is the lavish use of azulejos ornamentation employed in almost every phase of this great Spanish-American fair which includes the Iberian countries of Spain and Portugal, with those Western Republics which owe their existence in whole or in part to the discoveries and colonization of the glory days of the Spanish world empire. Through a congressional appropriation of \$700,000 the United States' participation is well under way and former Governor Thomas E. Campbell of Arizona, United States Commissioner General to the exposition, is now in Seville with a group of American architects and engineers to supervise the erection of three exhibition pavilions.

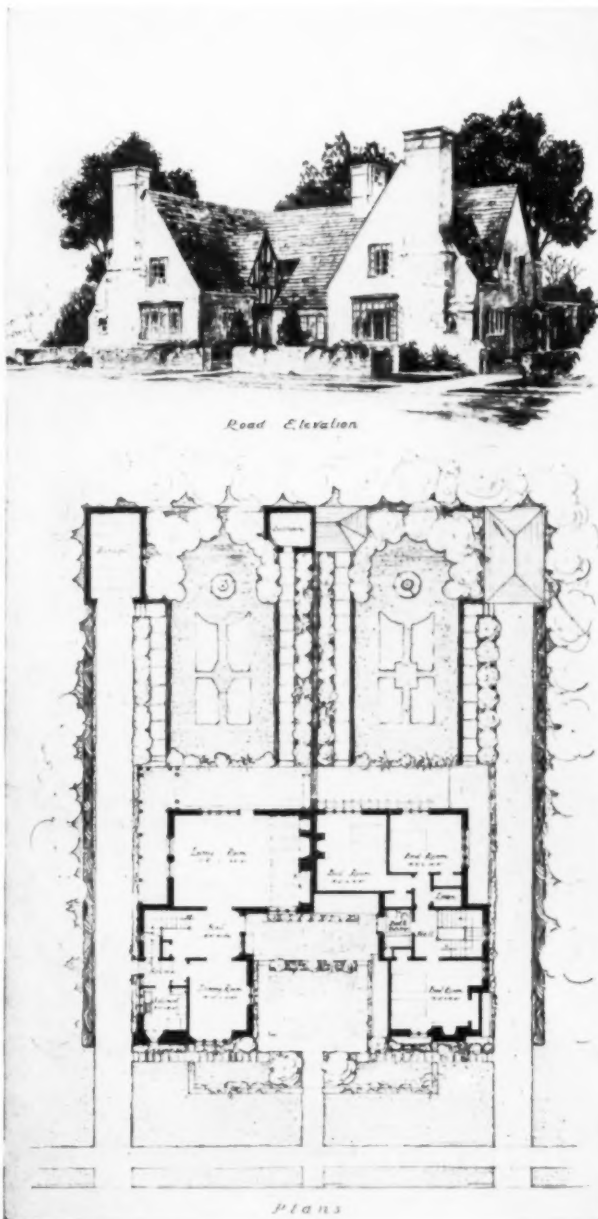
WAYSIDE REFRESHMENT STAND COMPETITION

The prizes in the second Wayside Refreshment Stand and Gasoline Station Competition have been awarded. The competition is forwarded through the medium of the Art Center of New York and the American Civic Association of Washington, D. C.

The purpose of the competition is to better the appearance of the roadside stands which, through ugliness of conception or carelessness of construction, are beginning to menace the beauty of highways and countryside.

The first prize of \$500 was won by Henry Ives Cobb, Jr.,

of New York City for a refreshment stand and gas station. It is colonial in design and, according to the prize jury, "stands out from all the drawings submitted for its sheer charm." The second prize of \$400 went to Malcolm P. Cameron, also of New York, whose Spanish mission design was treated with tile and stucco. The third prize of \$300 won by Sam F. Swales—a structure shingled and clapboarded. Morley Geer won

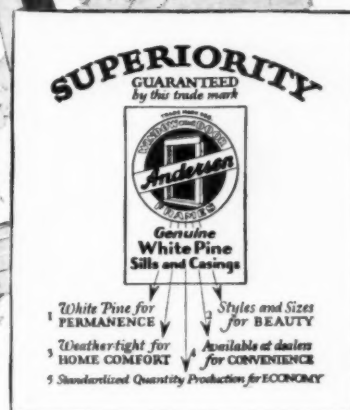


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Portland Cement Association Competition



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See Sweet's Architectural Catalog, page B 1160 for frames, page B 1785 for pulleys

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These frames have exclusive patented features allowing the economical use of wide blind stop construction. They are so accurately milled that sash can be fitted snugly. They are made of seasoned lumber to reduce variation to a minimum. All

sills and casings are of genuine, soft, white pine. Screens, storm sash and metal weather-stripping can be easily and cheaply installed.

These are the simple reasons why Andersen Casement Frames are becoming so popular with architects seeking casement charm and beauty with utility and economy.

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fourth prize of \$200, the fifth going to A. S. Cropsey and Charles Leonbardi.

William E. Frenaye, Jr., was winner of the first prize of \$500 in the design in the competition for separate refreshment stands. Mr. Frenaye designed a rustic structure which the jury characterized as "delightfully simple and straightforward and exceptionally economical." Franklin Scott received the second prize of \$400. The third prize of \$300 went to Laurence Doubleday of Ithaca, N. Y.; fourth prize of \$200 to James A. Britton of Boston, Mass., and fifth prize of \$100 to Burton A. Bugbee of Ithaca, N. Y.

CHICAGO ARCHITECTS AND COMPETITIONS

In the selection of the architect for the new auditorium to be built in Chicago, the Bulletin of The Illinois Society of Architects strongly favored a world-wide competition with no intention to detract from the ability of Chicago architects.

"Chicago," says the Bulletin, "is especially proud of the Tribune Tower, the architects of which were selected by means of an open competition held under the regulations of the American Institute of Architects. Nebraska is the proud possessor of a new State capitol which is recognized as one of the most magnificent buildings standing. The architect of this building was selected by means of an open competition. Los Angeles has its new public library which was handled in the same way, and there are dozens of other instances where important public and monumental buildings receive the benefit of the best architectural talent in the country through the medium of a competition."

OUT-GRIMMING GRIMM

The following item appeared on the Bulletin Board of the Architectural League of New York:

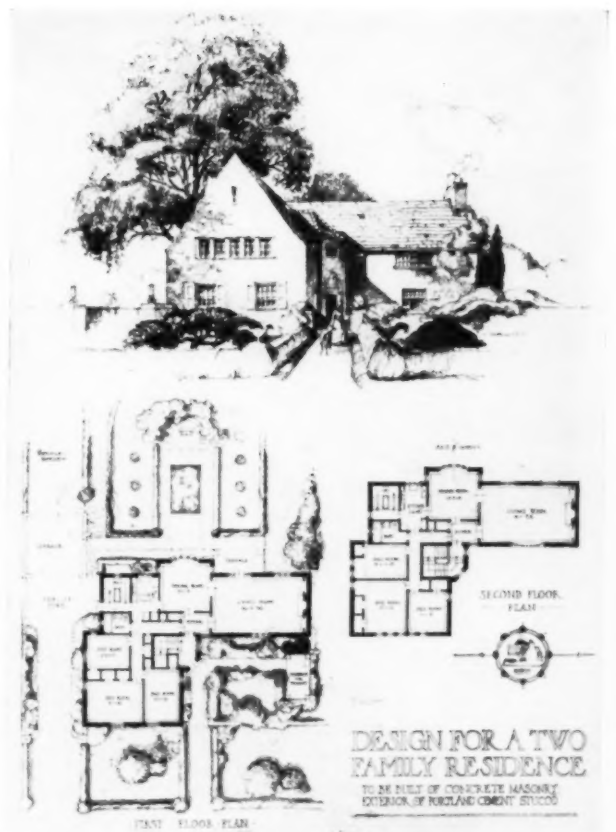
"Once upon a time there was an architect who designed a building so good that all the architects admired it."

SCHOOL PRIZE

For performing the best work among the competing universities and colleges in the competitions of the Beaux-Arts Institute of Design in New York City, this year, the University Medal of the American Group of the Société des Architectes Diplômés par le Gouvernement Français, has been awarded to the Department of Architecture of the Carnegie Institute of Technology.

CIRCULATING ART

The Arts Council of the city of New York has instituted a plan whereby objects of art may be borrowed, taken to the home for a limited period and then exchanged, just as one does a



FIRST PRIZE DESIGN FOR A TWO-FAMILY RESIDENCE
Portland Cement Association Competition

CONTRIBUTORS

- PHILIP L. GOODWIN, architect of New York City; Chairman of Building Committee, Beaux-Arts Institute of Design.
HERBERT CROLY, Editor, "The New Republic"; formerly Editor "The Architectural Record."
CLAUDE BRAGDON, architect; stage designer; author of "Beautiful Necessity", etc.
IRVING F. MORROW, architect, member of firm Morrow and Morrow, San Francisco; Associate Editor, "The Architect and Engineer."
RICHARD F. BACH, Associate in Industrial Arts, The Metropolitan Museum of Art, New York City; formerly Curator, Avery Architectural Library, Columbia University.
KINETON PARKES, English critic of art; author of "Sculpture of Today"; contributor to Athenaeum, Studio, etc.

PROFESSIONAL ANNOUNCEMENTS

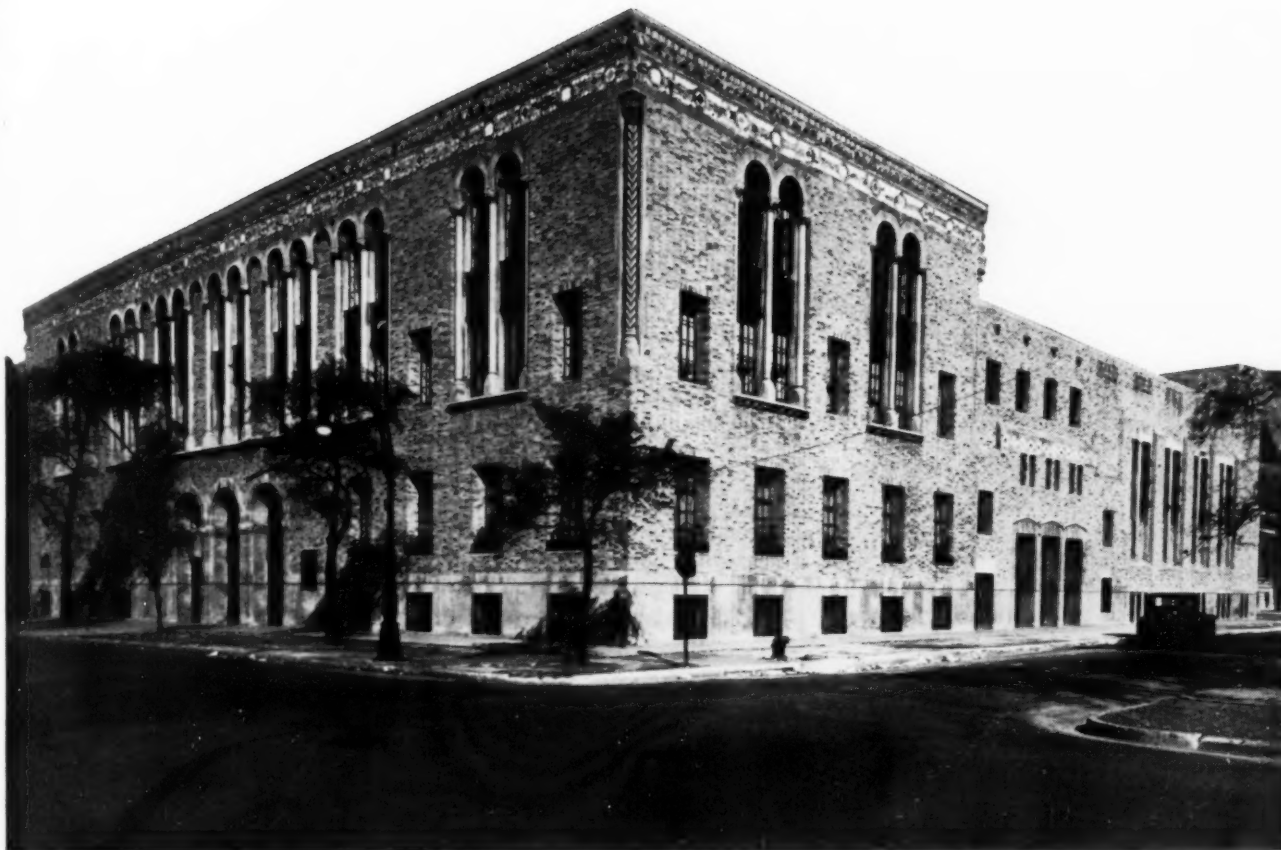
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Advertising Section

book from a library. Mr. Harvey Corbett has characterized the method adopted circularizing such art objects. "The present exhibition," he says, "is an innovation. To borrow a book from a library is now commonplace but to be able similarly to borrow prints, paintings, sculpture, textiles and other works of art is a new idea. The right use of leisure is one of the great problems of today and an interest in one or more of the arts points to the safest and most satisfactory solution."

BACK COPIES OF THE ARCHITECTURAL RECORD

The Architectural Record frequently receives requests for back numbers of The Record. Subscribers who wish to dispose of such issues should communicate with L. N. Harvey, Circulation Manager, The Architectural Record, 119 West 40th Street, New York City. We also have on file addresses of architects who have bound volumes of The Record available for purchase. Inquiries for these volumes should be addressed to Mr. Harvey.



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Architects

EVERY building is a materialization, a realization of some architect's vision. Unique in design, this Institute stands as a significant contribution to modern architecture by Eugene H. Klaber and Ernest A. Grunsfeld, Jr. Here, they have planned a structure that is worthy of sincere study. In its construction, the outside brickwork has been handled in an interesting manner.

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of building. Sargent locks and trim, Sargent pieces of solid brass and bronze, are sound building investments for any type of structure. Sargent Hardware is long lasting, carefully and faithfully made. Of time-defying materials, all moving parts are exactly machined and fitted to insure a minimum of wear, and long years of certain, silent operation. Sargent cylinder locks, secure, firm and thief-resisting, can be master-keyed in any practical combination for use in public or semi-public buildings.

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NEWS OF THE FIELD

REPRESENTATIVES of the leading manufacturers of wrought iron in various parts of the country met at the Duquesne Club recently and formed the Wrought Iron Research Association, the principal object of which is to gather and disseminate information about this time-honored metal.

The members of the Association are the American Swedo Iron Co., Philadelphia, Pa.; The Burden Iron Co., Troy, N. Y.; A. M. Byers Co., Pittsburgh, Pa.; Cohoes Rolling Mill Co., Cohoes, N. Y.; Ewald Iron Co., Louisville, Ky.; Glasgow Iron Co., Philadelphia, Pa.; Highland Iron and Steel Co., Chicago, Ill.; Hughes & Patterson, Philadelphia, Pa.; Logan Iron & Steel Co., Philadelphia, Pa.; Lockhart Iron & Steel Co., Pittsburgh, Pa.; Penn Iron & Steel Co., and Pittsburgh Forge & Iron Co., both of Pittsburgh, Pa.; Reading Iron Co., Reading, Pa.; and Ulster Iron Works, Dover, N. J. Headquarters of the Association will be in Pittsburgh, Pa.

SAMUEL CABOT, Inc., of Boston, Mass., have signalized their fiftieth anniversary in several distinctive ways, one of these consisting of the publication of a small booklet containing twelve reproductions on tinted stock, hot pressed, of steel portrait engravings of old time architects including Palladio, Sansovino, Bernini, etc. The reproductions are very well executed and well worth framing. Should any architect have been overlooked in the distribution of these sets of portraits, Samuel Cabot, Inc., will be happy to forward a copy on request, as long as the edition lasts.

AN INFORMATIONAL and technical service for users of lumber and wood in other forms has been established by the National Lumber Manufacturers Association. This service will be rendered at their request to those having construction, manufacturing or utilization problems, in specific cases, and generally through bulletins compiling results of various research activities.

Thirty consultant engineers and specialists have already been retained by the Association for this service. They are located in groups available to every section of the country and are prepared to handle problems related to construction, architecture, engineering, agricultural and industrial uses, forestry, merchandising, wood technology, lumber grades and a multitude of other topics.

The technical staff of the Association is continuously engaged in fundamental research and in addition maintains a continuous association with the Forest Products Laboratory of the United States Forest Service, at Madison, Wisconsin, the Forest Service headquarters in the United States Department of Agriculture, the United States Bureau of Standards and the Wood Utilization Committee of the U. S. Department of Agriculture, all at Washington. It also maintains a system for securing information on the peculiarities of wood and new practices in production and distribution from forests and mills. Further information may be secured from the headquarters of the Association, Transportation Building, Washington, D. C.

THE SECOND NATIONAL FUELS MEETING arranged for those who are interested in the production, distribution or utilization of fuels and heat will be held in Cleveland, Ohio, September 17 to 20, 1928. The Meeting will be under the auspices of the Fuels Division of the American Society of Mechanical Engineers. Further particulars may be secured from Mr. H. M. Hammond, Publicity Committee, 1050 Ivanhoe Road, Cleveland, Ohio.

ALBERT PICK & COMPANY—(furnishings, equipment and supplies for hotels, restaurants and institutions)—announce that their entire general offices are now located in new quarters in their main building, 1200 West 35th Street, Chicago, Illinois. This, they state, makes possible the concentration of their entire executive, sales, merchandising and operating organization under one roof.

WE ARE informed that a license arrangement has recently been completed between The Permutit Company and the Paige & Jones Chemical Company whereby the Paige & Jones Company is privileged to sell Zeolite softeners under the Gans (Permutit) patents, and that both present and future users of Paige & Jones Upflow Zeolite Softeners may operate them without being involved in any way legally.

OFFICIAL announcement is authorized by The Northwestern Terra Cotta Company of the purchase of the Advance Terra Cotta Company located at Chicago Heights, Illinois. The Northwestern Terra Cotta Company now owns and operates four terra cotta plants and one crucible plant. The latter is the Chicago Crucible Company located at Chicago. The four terra cotta plants are located at Chicago, Chicago Heights, St. Louis and Denver. The new plant at Chicago Heights, modern in every way, considerably increases the facilities of The Northwestern Terra Cotta Company, already the largest as well as the oldest manufacturer of terra cotta in the world.

FOLLOWING a recent session of the convention of the American Concrete Institute, thirty-four manufacturers of concrete stone held a meeting and formed the Association of Cast Stone Manufacturers, with the following officers:

President, C. Van de Bogart, Economy Concrete Co., New Haven, Conn.

1st Vice-President, Wm. P. Eddy, Onondaga Litholite Co., Syracuse, N. Y.

2nd Vice-President, M. A. Arnold, Arnold Stone Co., Jacksonville, Fla.

Secretary, Frank M. Brooks, Brooks Art Stone Corp., Pasadena, Calif.

Treasurer, Paul Formigli, Formigli Architectural Stone Co., Philadelphia, Pa.

Temporarily, C. G. Walker, of the Portland Cement Association, 33 West Grand Avenue, Chicago, is the active Secretary.



THERE is only one Tapestry brick in the world. It is made by Fiske from a special clay found only at their Tapestry plant in Ridgway, Pa. The rich blending of colors in Fiske Tapestry Brick is the result of a special method of firing that our brick-making experience of sixty years has developed. Tapestry Brick is made only at this plant. No other plant can duplicate it—not even one of our own.

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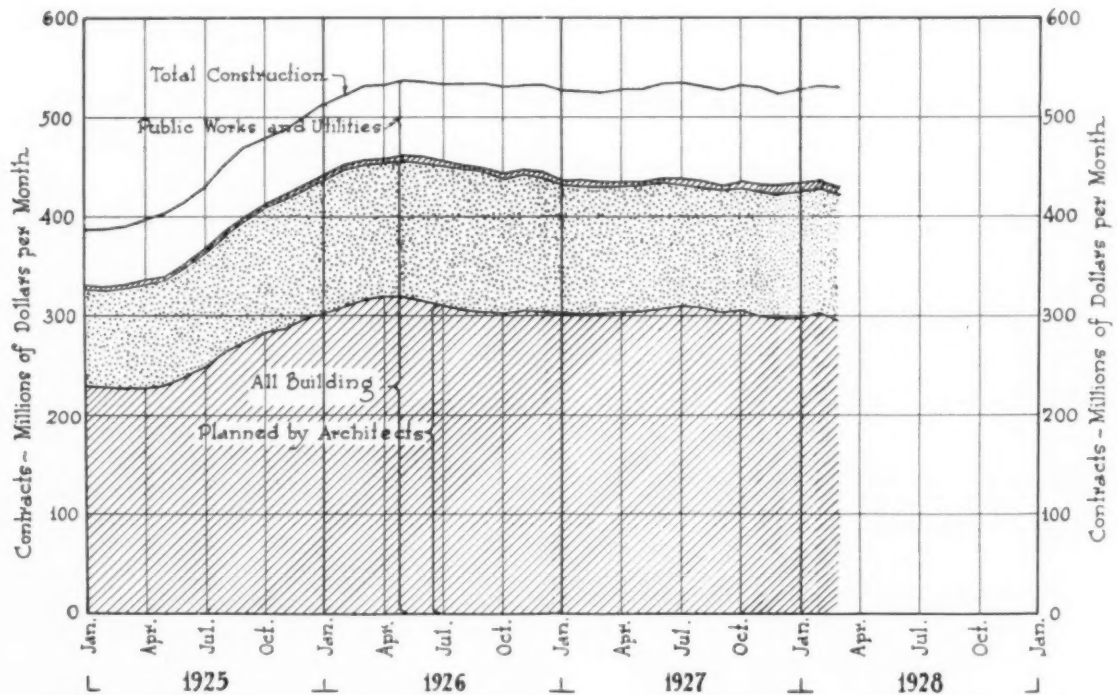
FISKE BRICK

CONSTRUCTION STATISTICS

From the records of F. W. DODGE CORPORATION, Statistical Division. The figures cover the 37 states east of the Rocky Mountains and represent about 91 per cent. of the country's construction volume.

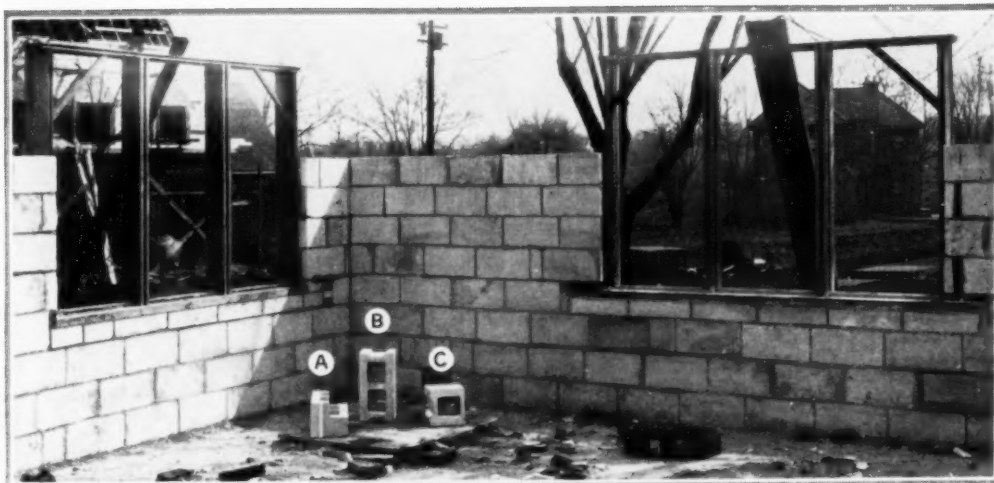
First Quarter, 1928

Classification	TOTAL CONTRACTS		PLANNED BY ARCHITECTS		
	Number of Projects	Valuation	Number of Projects	Valuation	Per cent. of Total
Commercial Buildings	5,814	\$ 199,622,100	2,423	\$157,282,400	79%
Educational Buildings	674	75,900,900	579	73,488,600	97%
Hospitals and Institutions	209	29,317,000	152	28,093,100	96%
Industrial Buildings	1,441	121,655,600	507	43,329,000	36%
Military and Naval Buildings	39	2,722,200	16	1,061,900	39%
Public Buildings	241	17,493,000	142	16,185,300	93%
Religious and Memorial Buildings	476	26,078,200	343	23,840,400	91%
Residential Buildings	31,770	707,365,900	8,955	467,254,400	66%
Social and Recreational Projects	603	62,555,000	383	57,865,200	93%
Total building	41,267	\$1,242,709,900	13,500	\$868,400,300	70%
Public Works and Utilities	2,825	242,357,100	65	5,616,600	2%
Total construction	44,092	\$1,485,067,000	13,565	\$874,016,900	59%
Total construction, First Quarter, 1927	37,706	1,398,776,100	12,248	860,224,200	61%



General Trend of Building and Engineering Construction

As contributing to adaptability, note ease of cutting on the job to fit around openings. Illustrated are—A, bond tile; B, standard tile; C, half standard tile. No special shapes or sizes required to build a tight, workmanlike job.



This picture shows how light weight and smooth surface of tile contribute to ease and speed of placing. Wide side walls contribute to ease of placing mortar and materially reduce mortar loss.



As shown in this picture, header brick bonding is easily accomplished with Structolite Tile. Practically all patterns of bonding are easily adaptable to a simplified construction without requiring continuous brick work clear through the wall.

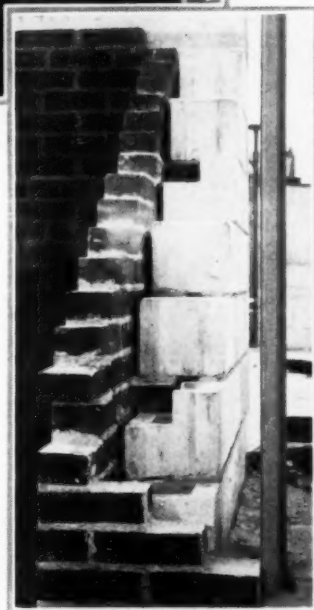
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Note air space between face brick and tile, also between end of bonding brick and tile. This method is an assurance of a dry wall to keep insulation value at a maximum. The finished construction is better than ordinary masonry in that it gives the effectiveness of an additional separate insulation without the added cost.

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Send me data on Structolite Tile.

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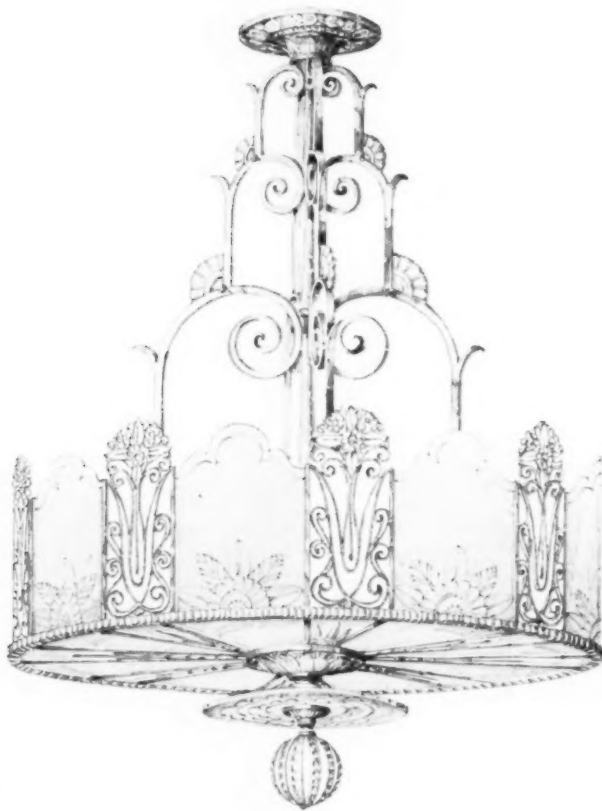
Architectural Record, June, '28



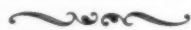
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RECEIVED
FROM THE PUBLISHERS

HOOKER, KATHARINE.

Through the Heel of Italy. New York: Rae D. Henkle Co., Inc., 1927. 1st ed. xiv. 305 pp. Ill. 6 x 9 in. Cloth. \$5.00.

SITWELL, SACHEVERELL.

German Baroque Art. New York: Doubleday, Doran Co., 1928. 1st ed. 109 pp. Ill. (48 plates.) 7½ x 9½ in. Cloth. \$6.00.

DORAU, HERBERT B., AND ALBERT G. HINMAN.

Urban Land Economics. New York: The Macmillan Co., 1928. 1st ed. xvi. 570 pp. Ill. (Diagrams & maps.) 5¼ x 8 in. Cloth. \$4.00. (Land Economics Series.)

BAILEY, L. H.

The Garden Lover. New York: The Macmillan Company, 1928. 1st ed. 154 pp. 4½ x 7 in. Cloth. \$1.50.

ROLFE, WILLIAM J.

A Satchel Guide to Europe. (Revised and Enlarged by William D. Crockett). 1928. 48th Annual ed. cvi. 596 pp. (Ill. maps.) 4½ x 6½ in. Cloth. \$3.00. Leather. \$4.00.

HOPKINS, R. THURSTON.

This London: Its Taverns, Haunts and Memories. Philadelphia: J. B. Lippincott Company, 1928. 1st ed. viii. 280 pp. Ill. 5¾ x 8¾ in. Cloth. \$4.00.

KIMBALL, FISKE.

American Architecture. New York: The Bobbs-Merrill Company, 1928. 1st ed. 262 pp. Illustrated. 5¾ x 8¾ in. Cloth. \$4.00.

THE PENCIL POINTS PRESS, INC., PUBL.

Winning Designs 1904-1927 Paris Prize in Architecture (Lloyd Warren Memorial). Introduction by John F. Harbeson, New York. The Pencil Points Press, Inc., 1928. 1st ed. Portfolio 35 plates (20 plates 15 x 20 in.; 15 plates 10 x 15). Board. Price \$6.00. (Society of Beaux-Arts Architects.)

WILSON, ERNEST H.

More Aristocrats of the Garden. Boston: The Stratford Co., 1928. 1st ed. ix. 288 pp. Ill. 6½ x 9½ in. Cloth. \$5.00.

GRAY, GRETA, A. M.

House and Home. Philadelphia: J. B. Lippincott Co., 1927. 2nd ed. xi. 356 pp. Ill. 5¾ x 8½ in. Cloth. \$3.00.

EBERLEIN, HAROLD DONALDSON, AND ROGER WEARNE RAMSDELL.

Small Manor Houses and Farmsteads in France. Introduction by Leigh French, Jr., Philadelphia: J. B. Lippincott Company, 1926. 1st ed. xx. 303 pp. Ill. 7¾ x 11¼ in. Cloth. \$15.00.

GOULD, MR. AND MRS. G. GLEN.

Period Lighting Fixtures. New York: Dodd, Mead & Company, 1928. 3rd ed. ix. 274 pp. Ill. 6¼ x 9¼ in. Cloth. \$3.50.

THOMAS, MINOR WINE, PH. D.

Public School Plumbing Equipment. New York: Teachers College, Columbia University, 1928. 1st ed. 128 pp. Ill. (Charts and Diagrams.) 6¼ x 9¼ in. Cloth. \$1.50.

(Continued on page 158)



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ARCHITECTS know by experience that the only stuccos that have successfully withstood the test of time are true-cement stuccos—that is, stuccos made with either portland cement or BRIXMENT.

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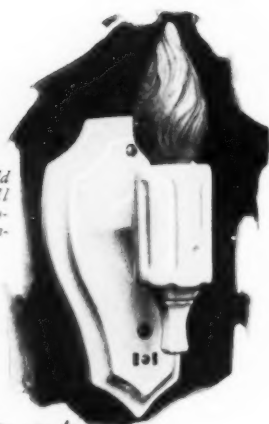
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shape side wall
bracket with lever
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Sherman, Chicago, June
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TILES BATHROOM ACCESSORIES
SWITCH PLATES LIGHTING FIXTURES

RECEIVED FROM THE PUBLISHERS (Continued)

DIXON, ROLAND B.

The Building of Cultures. New York: Charles Scribner's Sons, 1928. 1st ed. x. 312 pp. Ill. (Diags. and maps.) 9 1/4 x 6 1/4 in. Cloth. \$4.00.

SCHOMMER, P.

L'Art Décoratif au Temps du Romantisme. Paris, France: G. Van Oest, 1928. 1st ed. 41 pp. xxxii plate illustrations. 6 3/8 x 8 3/8 in. Paper. 18 francs. (Architecture and Decorative Arts Series.)

GRABAR, ANDRÉ (University of Strasbourg).

La Décoration Byzantine. Paris, France: G. Van Oest, 1928. 1st ed. 43 pp. xxxii plate illustrations. 6 3/8 x 8 3/8 in. Paper. 18 francs. (Architecture and Decorative Arts Series.)

GORDON, GEORGE BYRON.

Rambles in Old London. Philadelphia: Macrae Smith Co., 1928. 2nd-Travelers' Edition. 334 pp. Ill. 5 1/2 x 8 in. Cloth. \$2.50.

FLETCHER, SIR BANISTER, F. S. A., F. R. I. B. A.

A History of Architecture on the Comparative Method. New York: Charles Scribner's Sons, 1928. 8th ed. xxxvi. 929 pp. Ill. 6 1/4 x 9 3/4 in. Cloth. \$12.00.

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"A Treatise on Textured Wall Finishes." "Textone" finish for interiors of Spanish design, English, Colonial, antique plaster, Italian Travertine stone, caenstone and modern designs. How to produce designs: mixing and application, smoothing, lining, sandpapering and sealing. Multi-color effects. Miscellaneous textured finishes including palm, scroll, grass cloth, monastic, English trowel, paper stipple. Relief ornament; stencils. Ornament in colored "Texsand." Treatment of wood trim, panel mouldings and plaster or papier maché ornament. Preparation of surface for "Textone." Mixing and application. How to use "Textone" glaze. Preparation of various wall surfaces and number of coats required for finished job. Typical installations. United States Gypsum Company, 300 West Adams Street, Chicago. Ill. 8 1/2 x 11 in. 60 pp. Ill.

CONCRETE

A. I. A. File 413. "The Key to Firesafe Homes." Different types of concrete floors for hotels, apartments, large buildings, etc. Structural advantages; convenience, beauty and comfort. Coverings for concrete floors. Terrazzo, ceramics, marble, mosaics, art marble, slate and concrete floor tile. Types of concrete floor construction. Detailed drawings. Typical installations. Portland Cement Association, 33 West Grand Ave., Chicago, Ill. 8 1/2 x 11 in. 20 pp. Ill.

WINDOWS, CASEMENTS

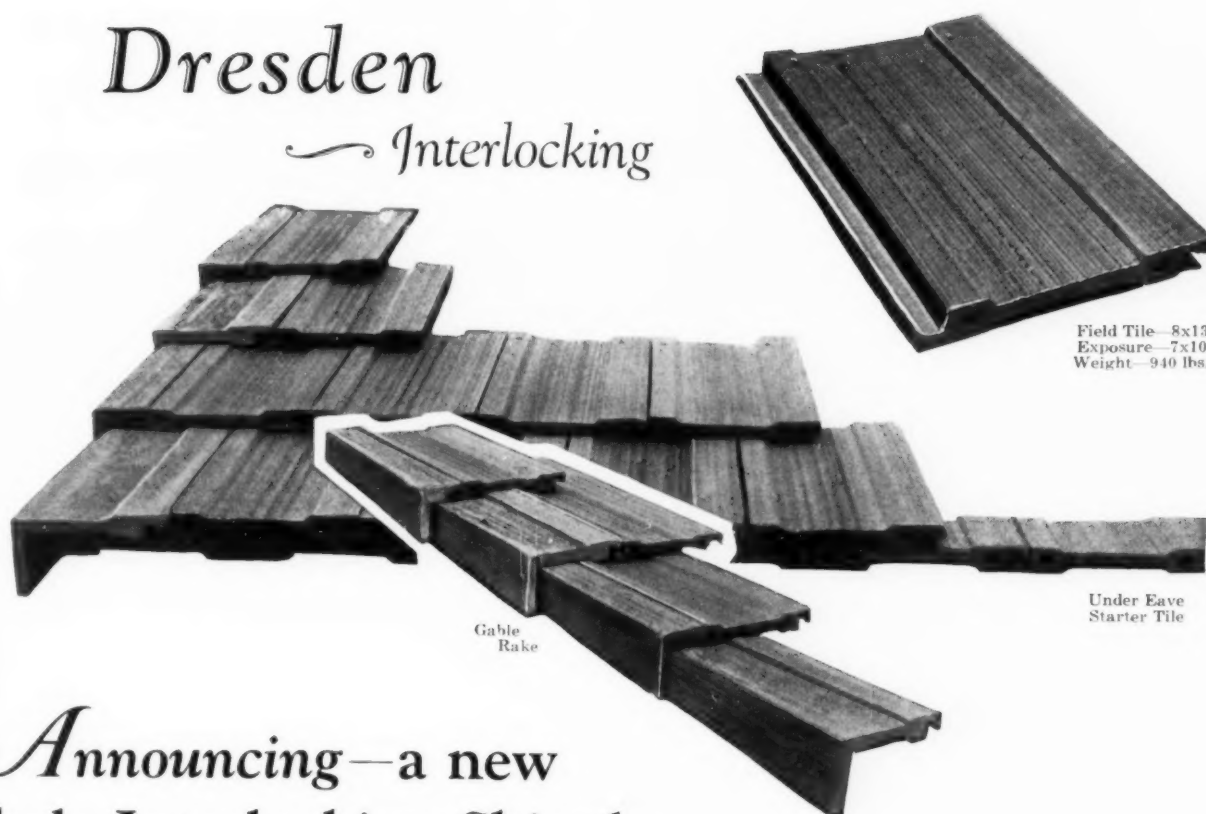
File No. 16E1. Detail Sheet No. 101. Lupton Heavy Casements. Detailed drawings. Brief Specifications. David Lupton's Sons Company, Allegheny Avenue & Tulip St., Philadelphia, Pa. 8 1/2 x 11 in. 4 pp. folder. Ill.

(Continued on page 160)

The Architectural Record, June, 1928

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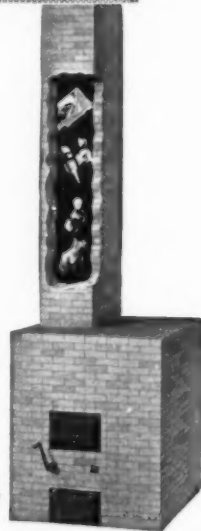
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A. I. A. File No. 35 C-12. Catalogue No. 5. The White House Line. Detailed drawings and layouts of sectional units for kitchens. Information regarding construction, finish, fittings, size, etc. Installation data and typical installations. Janes & Kirtland, Inc., 101 Park Avenue, New York. 8½ x 11 in. 2 pp. Ill.

CASEMENTS, STEEL

"Decorating with casements." Practical suggestions for the curtaining and screening of Steel Casement Windows of all types. Advantages of casement windows. Detailed drawings of screens. The Detroit Steel Products Company, 2250 East Grand Boulevard, Detroit, Michigan. 6¼ x 9 in. 31 pp. Ill.

HEATERS, UNIT

"How to cut heating costs." Features and advantages of the Trane system of unit heating. Cost and general information on unit heating. Partial list of installations. The Trane Company, La Crosse, Wisconsin. 8½ x 10¾ in. 18 pp. Ill.

JOISTS AND STANCHIONS, STEEL

"Bethlehem Steel Joists and Stanchions for Dwellings, Apartment Houses, etc." Catalogue S-28. Weights and dimensions. Properties and safe loads. Spacing of joists. Standard specification for structural steel for buildings. Building code and ordinances. Weights of bolt heads and rivets. Approximate weights of roof coverings. Bethlehem Steel Company, Bethlehem, Pennsylvania. 4½ x 6½ in. 70 pp. Ill.

INCINERATORS

A. I. A. File No. 35J41. "The School Problem of Waste Disposal is Solved with the Kernerator." What the "Kernerator" is. The by-pass flue and vertical grate. Advantages. General information. Typical installations. Kerner Incinerator Co., 641 East Water Street, Milwaukee, Wis. 8½ x 11 in. 6 pp. folder. Ill.

PARTITIONS, METAL

A. I. A. File No. 28-A-3. "Thinking Today in Terms of Tomorrow." Metal partitions finished in the graining of natural wood. Typical installations. The Mills Co., Wayside Rd. and Nickel Plate R. R., Cleveland, Ohio. 8½ x 11 in. 4 pp. folder. Ill.

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"Masterseal" colorless surface waterproofing for preserving the beauty of buildings of stucco, brick, concrete, natural or artificial stone, etc. Description of treatment and directions for applying. The Master Builders Company, Cleveland, Ohio. 3½ x 6¼ in. 6 pp. folder. Ill.

INSULATING BOARD

Architect's Bulletin No. 3. A. I. A. File No. 3741. Roof and Wall Sheathing. Raw material and manufacture of "Maftex." The purposes and value of sheathing for walls and roofs. Method of application. Special notes on roof and wall sheathing. Detailed drawings. MacAndrews & Forbes Co., 3rd & Jefferson Sts., Camden, N. J. 8½ x 11 in. 16 pp. Ill.

CEMENT

Carney Cement for brick and tile mortar. Installations including Lake Shore Drive Hotel, Chicago, Book Tower, Detroit, etc. Advantages. Specifications. The Carney Co., Mankato, Minn. 8½ x 11 in. 20 pp. Ill.

(Continued on page 162)

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A. I. A. File No. 27b. (As presented in the 22nd edition of Sweet's Architectural Catalogue.) Specially prepared for the use of architects and specification writers. Cast and wrought bronze loose pin butts in Standard and Templer styles. Cast iron butts in Loose Pin, Fast Joint Asylum and Loose Joint styles. Size, classification and finishes of door checks and springs. Brackets, hinges and pivots. Fire exit devices including automatic exit bars and bolts, exit latches and door locks. Period designs of hardware trim. Modern designs of hardware trim for commercial buildings. Entrance door handles and escutcheons. Handles and door knobs, etc. Definitions and terms applying to locks and types of Corbin lock construction for public buildings, asylums and institutions, schools, apartment houses and residences, hotels. Window hardware. Transom lifters and operators. Hooks, letters, numerals and knockers. P. & F. Corbin, New Britain, Conn. 8½ x 11 in. 72 pp. Ill.

CONCRETE CONSTRUCTION

Effects of calcium chloride on concrete. Uses and advantages of Solvay calcium chloride in concrete construction, including lower water-cement ratio, greater strength through proper curing, early strength and acceleration. Waterproofing. Effects of calcium chloride on reinforcing. Effect of temperature on strength of concrete. Use of calcium chloride in cold weather. Solvay calcium chloride in various types of concrete construction. Typical installations. Concrete products. Specifications. Solvay Sales Corporation, 40 Rector Street, New York. 7½ x 10½ in. 32 pp. Ill.

WALL DECORATION

"Rufkote Text Book of Artistic Wall Textures," by F. N. Vanderwalker. Guide for producing practical and artistic plastic stone wall textures with the use of "Rufkote." Full description of tools, methods and materials necessary. Preparation of various types of wall surfaces and application of "Rufkote." How to use with color. Producing texture patterns. Glaze-staining, highlighting, bronzing, starching, sizing and smut coats, polychrome. Relief and stencil effects. Ornament. H. B. Wiggin's Sons Co., 233 Arch Street, Bloomfield, N. J. 5 x 8 in. 96 pp. Ill.

GLASS

Catalog No. 727. Globes of Celestialite glass. Method of manufacture. Types of globes for all purposes with particulars of size and wattage. Uses of Celestialite glass. Gleason-Tiebout Glass Co., 200 Fifth Avenue, New York City. 3 7/8 x 8 1/2 in. 20 pp. Ill.

REFRIGERATION

Carbonic anhydride system for apartments, theatres, stores, office and commercial buildings, clubs, hotels and restaurants, hospitals, schools. Typical installations and advantages obtained by use. Brunswick-Kroeschell Co., New Brunswick, N. J. 8½ x 11 in. 24 pp. Ill.

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THE ARCHITECTURAL RECORD

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JUNE, 1928

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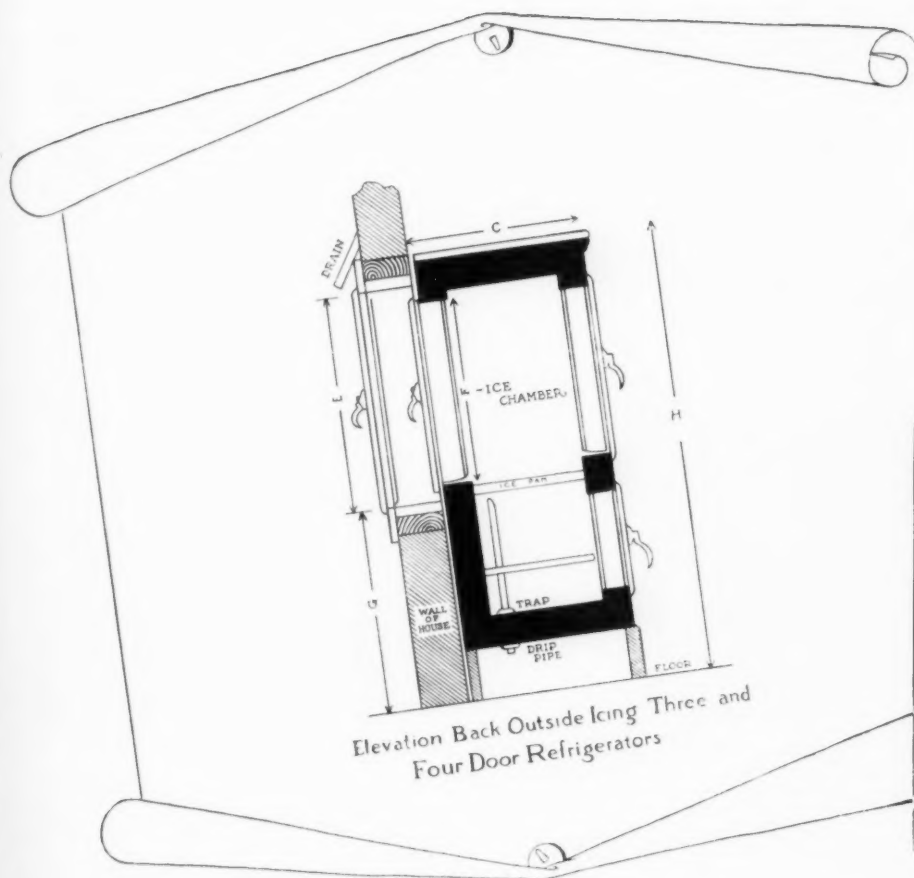
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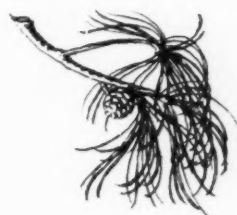
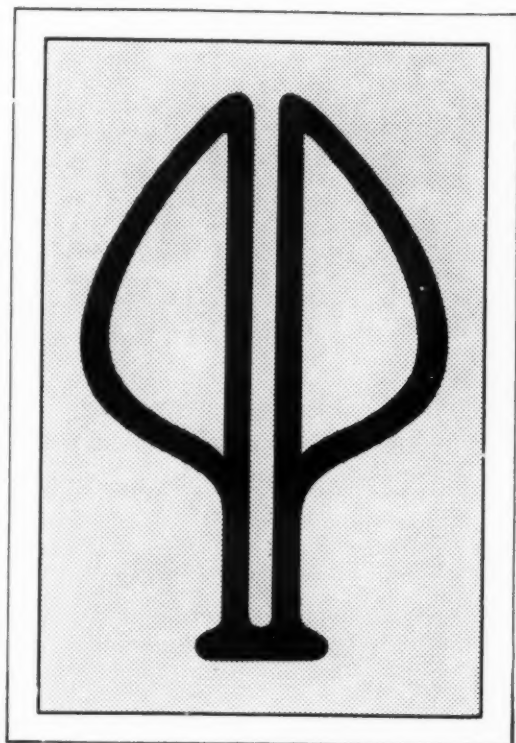
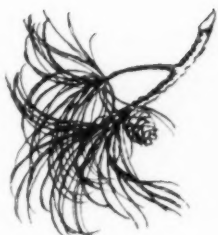
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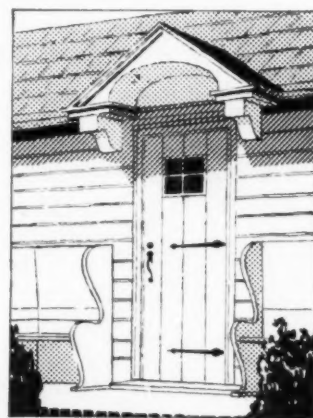
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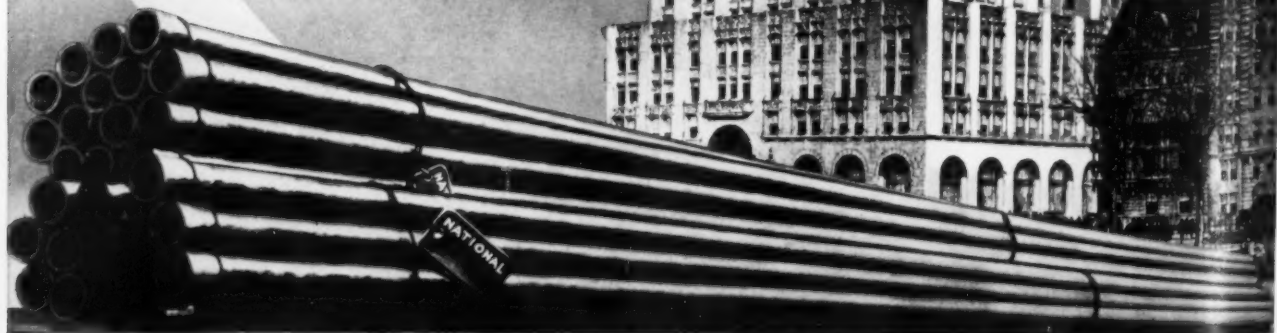
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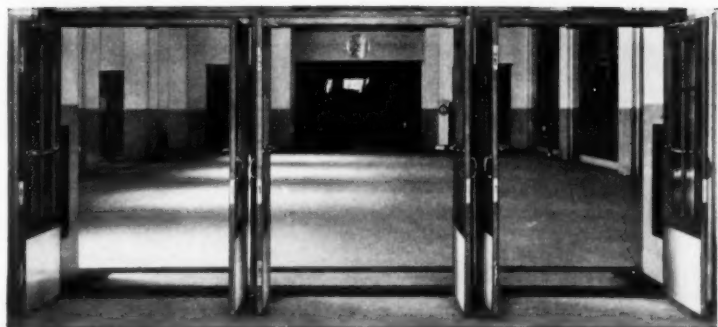
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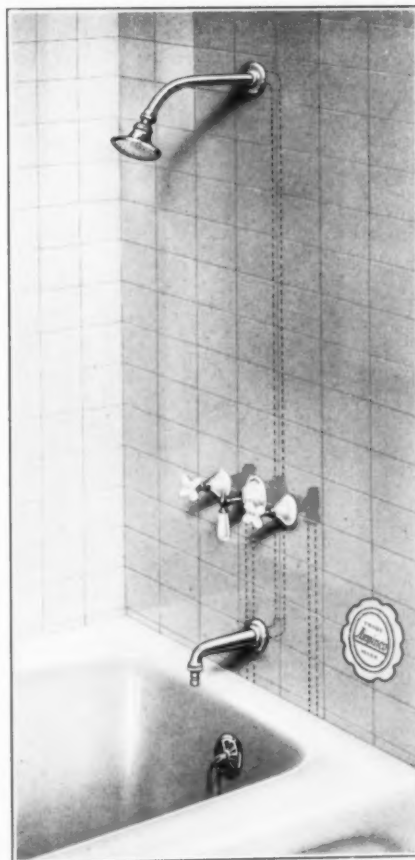
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IN CHICAGO, in 1884, the first skyscraper in America was built — the Home Life Insurance Building, still standing at LaSalle and Adams Street. Carnegie Steel Company furnished the steel beams used in this building. They were Bessemer steel.

Many improvements in structural steel have been made since that time. Today, the new Carnegie Beam Sections represent the latest improvements in structural steel design.



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Descriptive handbook—"Carnegie Beam Sections"—will be sent at your request

IN CHICAGO, in 1928, these new Carnegie Beams are being used in the construction of the 19-story Edgewater Beach Apartment Hotel, at Sheridan Road and Bryn Mawr Avenue.

For apartment house construction, or for tier buildings where typical floors exist, these new sections are especially suitable. The constant-depth principle, exclusive with this new series, effects substantial savings in detailing, in fabrication and erection.

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Biltmore Hotel of Santa Barbara, Santa Barbara, Calif. Architect, Reginald Johnson. General Contr., P. J. Walker. Lathing and Plastering Contr., Edward Westberg.

Beautiful Stucco Effects . . . *made truly permanent*

Fashioned after the style of a Spanish grandee's palace, this new Santa Barbara Biltmore, with its richly tinted stucco walls, is another example of architectural beauty made permanent.

Here the YPS Stucco Method, as in thousands of beautiful structures throughout the country, has

formed a vital part of the foundation for attractive exterior effects. Here, again, YPS Stucco-mesh, properly centered in the stucco slab by YPS Economy Stucco Nails, is responsible for this permanent result. For data and specifications see YPS pages in Sweet's Architectural Catalogue.

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*An interesting article featuring the Santa Barbara Biltmore
will be found in the February issue of Architect and Engineer.*

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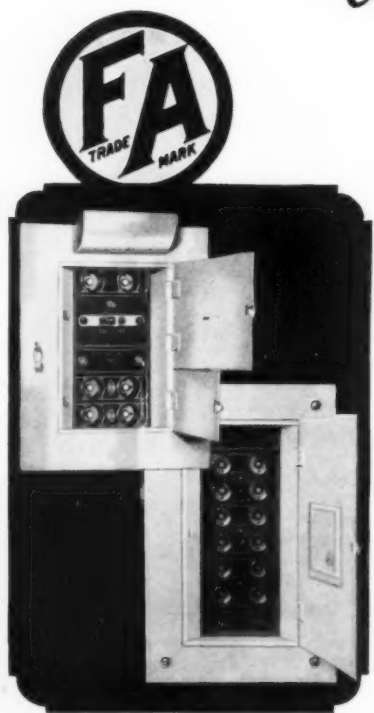
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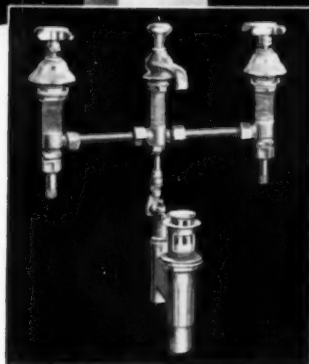
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K-8065 Interchangeable Lavatory Faucets with self-closing units on a Kohler Vitreous China Lavatory



K-8065 Kohler Interchangeable Lavatory Faucet with self-closing unit and oscillating handle. To change to compression faucet, remove compact self-closing unit.



K-8002 Kohler Combination Lavatory Fitting. May be equipped interchangeably with compression valves as shown or with the self-closing type. This fitting has the positive-acting Kohler lift drain with patented spring ball to keep the drain open or closed.



K-8067 Kohler Interchangeable Lavatory Faucet with compression unit. To change to self-closing type, take out removable seat and compression unit.

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The self-closing units give an even flow of water simply by pushing the oscillating handle in any direction. When the handle is released the faucet closes promptly. The compression units open at half turn and give a strong, even flow of water.

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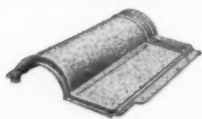
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Number 2. This illustration is from a booklet entitled "Analyzing the Problem of Resilient Floors in Clubs, Lodges, Apartments and Hotels"—one of a series of booklets on polychrome resilient floors.

Each booklet gives suggestions for the proper use of resilient floors in a different type of building. A complete set of the booklets is yours for the asking.

See next page

SELECTING FINISHED FLOORING MATERIALS FOR CLUBS, LODGES, APARTMENTS AND HOTELS

Relative Importance of Various Characteristics of Finished Flooring Materials in Twenty-two Divisions of a Composite Residential and Club Building

Amount of attention to be given each characteristic is indicated by points in 100. Thus, the properties of predominant importance rate 100; secondary properties by lower figures.

Type of Space	Appearance	Sanitation	Durability	Maintenance	Quietness	Comfort	Resistance to Stains or Discoloration	Low Cost
Entrance Vestibules	80	100	100	100	20	30	0	90
Public Corridors	100	90	100	90	80	60	0	70
Lobbies	100	80	90	90	100	90	0	70
Front Office	10	50	100	90	70	90	0	40
Lounges (and Lodge Rooms)	100	40	70	60	90	90	0	60
Writing Rooms	100	40	60	50	100	90	0	40
Restaurants, Tea Rooms	100	90	80	80	70	70	30	50
Kitchens, Food Service	100	90	80	60	60	70	30	50
Bedrooms	80	100	90	80	80	40	40	50
Bathrooms	20	100	90	100	10	10	100	80
Living Rooms	40	100	80	100	30	70	10	50
Dining Rooms	60	100	70	100	50	80	10	50
Guest Rooms	0	100	100	100	10	50	60	80
Stairways	0	40	100	80	0	0	50	80
Reception Rooms	0	40	100	90	60	80	0	80
Club Rooms	70	70	100	90	100	90	0	70

For your copy of this and other booklets in this series write to: Architectural Service Department, BONDED FLOORS COMPANY, Inc., Kearny, New Jersey.

Other types of buildings analyzed include: Hospitals, Schools, Office Buildings, Stores.

Analyzing the Problem of Resilient Floors in CLUBS, LODGES, APARTMENTS and HOTELS

When you send for a book offered free in an advertisement, we know you want information—facts that you can get at *quickly*. We know the architect hasn't time to wade through five-page chats about extraneous matters.



The very title of this new booklet, "Analyzing the Problem of Resilient Floors in Clubs, Lodges, Apartments and Hotels," is in itself a time saver. This book concentrates on a group of buildings, the flooring problems of which are closely related.

If you do not design this type of building, you need not waste a second reading this book. Other titles in the series will be more useful to you.

See the yellow panel above for a complete list of this set of booklets. The information in each is concisely presented. These studies of resilient floors were written by architects—not by an optimistic advertising department. By the chart method (shown above) a great deal of ground is covered in very little space.



We think that you will find these booklets useful—and worthy of preservation in your information file. Write for your set.

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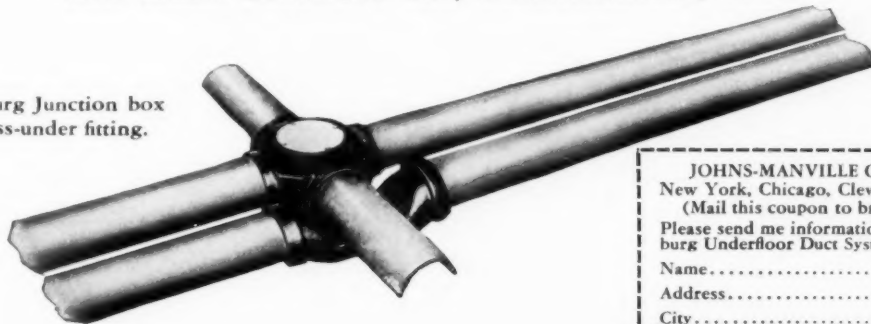
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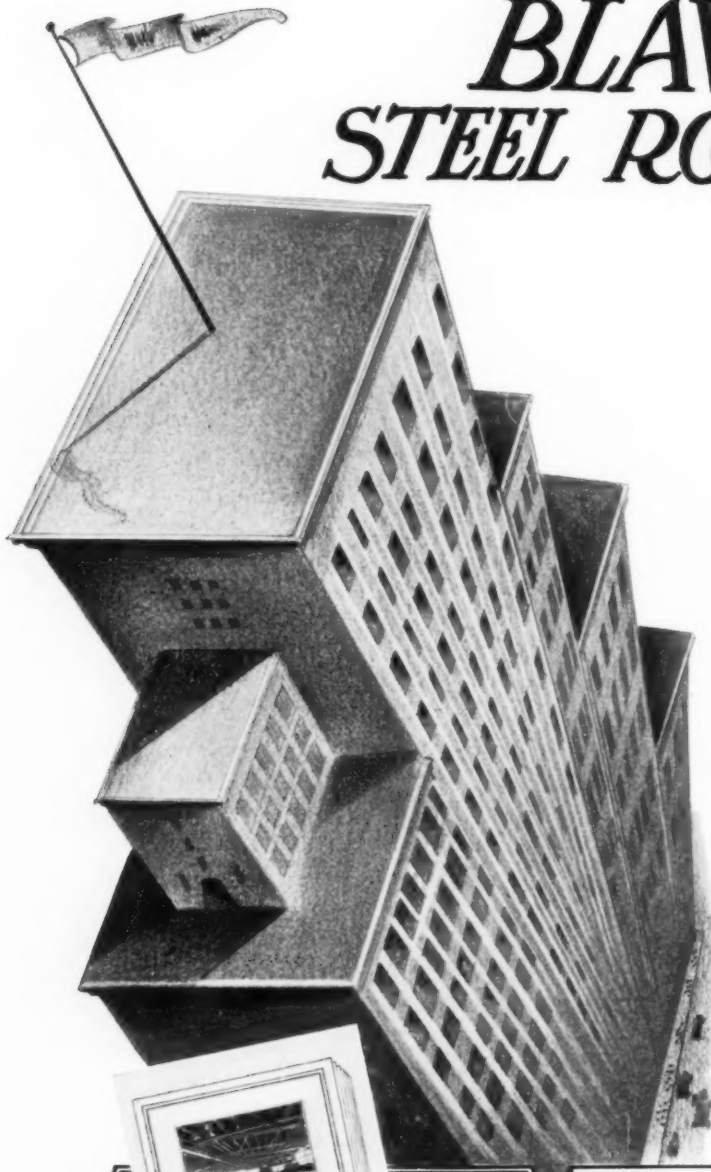
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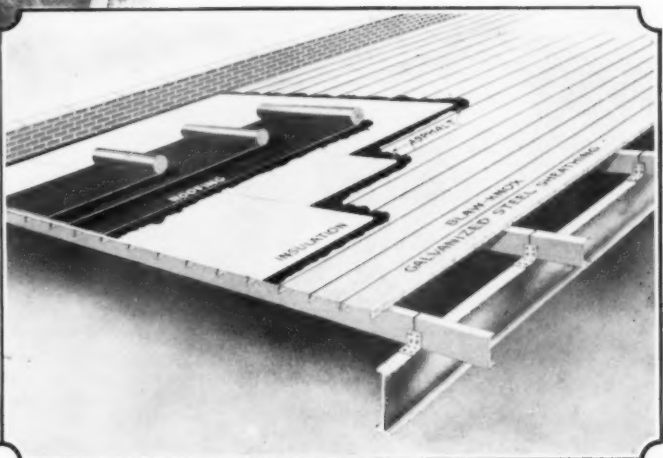
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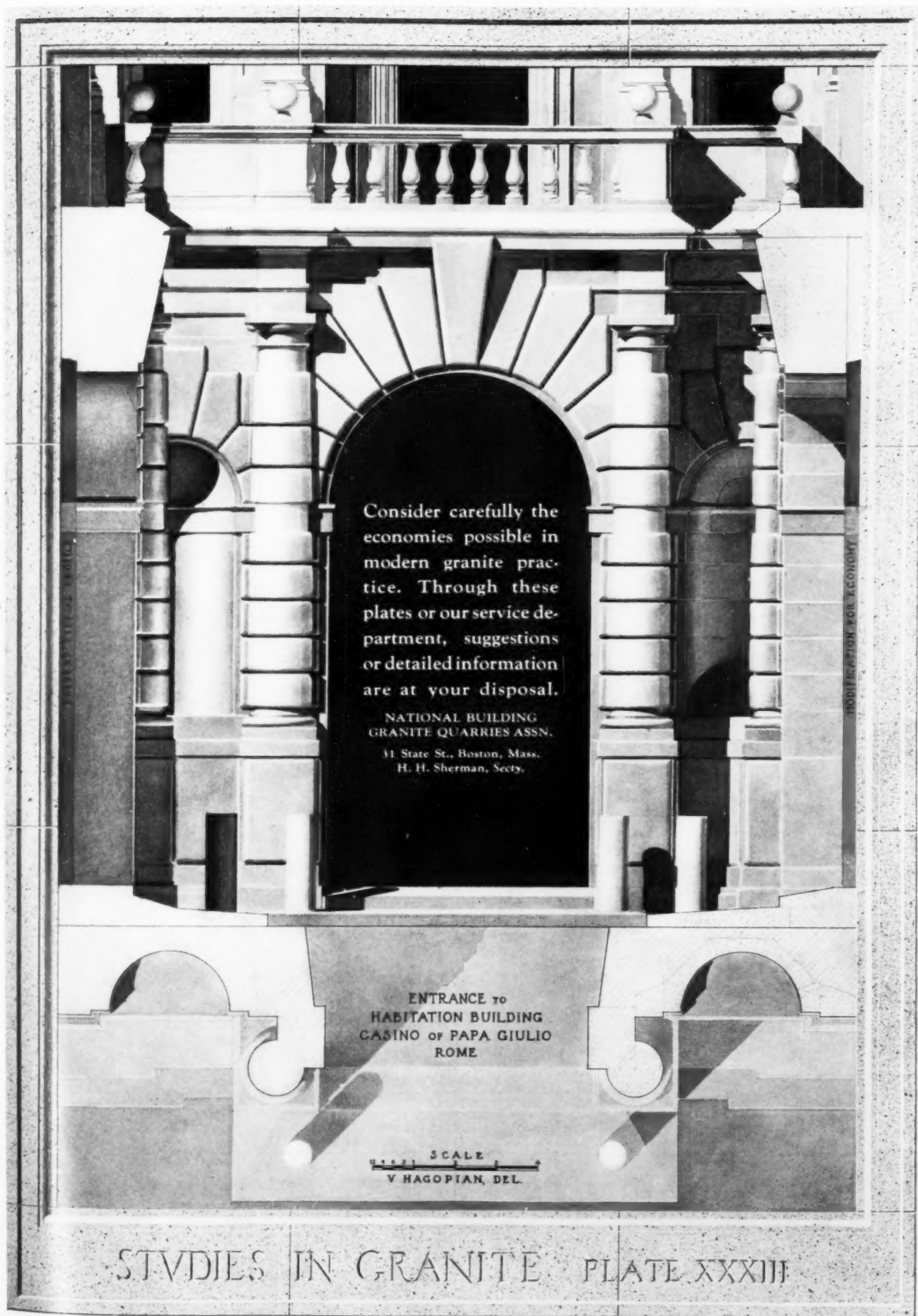
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The Columbia-Presbyterian Medical Center, New York, N. Y., as it will appear when finished. James Gamble Rogers, Inc., architects; Werner Nygren, Inc., consulting heating engineers, Gillis & Geoghegan, heating contractors.

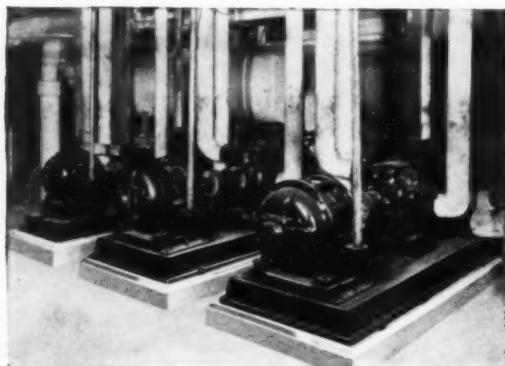
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The Style "08" Ornament, made of cast bronze, is intended for ecclesiastical work. This can be furnished in any desired color or finish, and attached to any style stamped grille.

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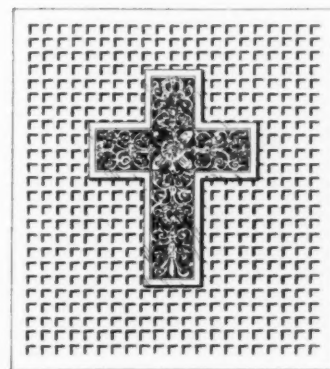
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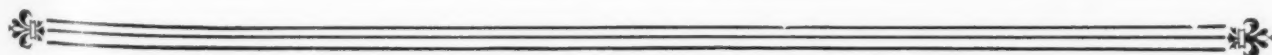
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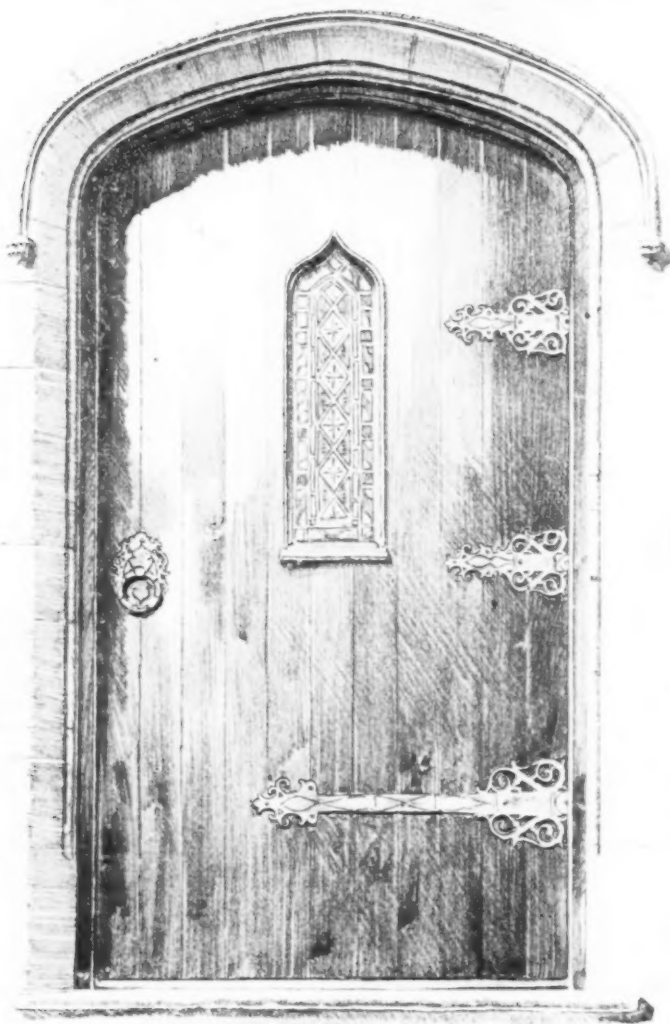


The Style "08" Ornament as it appears when attached to our Style "01" plain lattice grille.

ORNAMENTAL Steel GRILLES



McKINNEY



HE strikingly beautiful McKinney hinge straps and handle shown here are representative of the "Alhambra" design, one of a number of McKinney patterns fashioned in Forged Iron.

The inspiration for this graceful design comes from the masterly examples of ironwork found in southern European architecture of earlier centuries, notably that of Italy and Spain.

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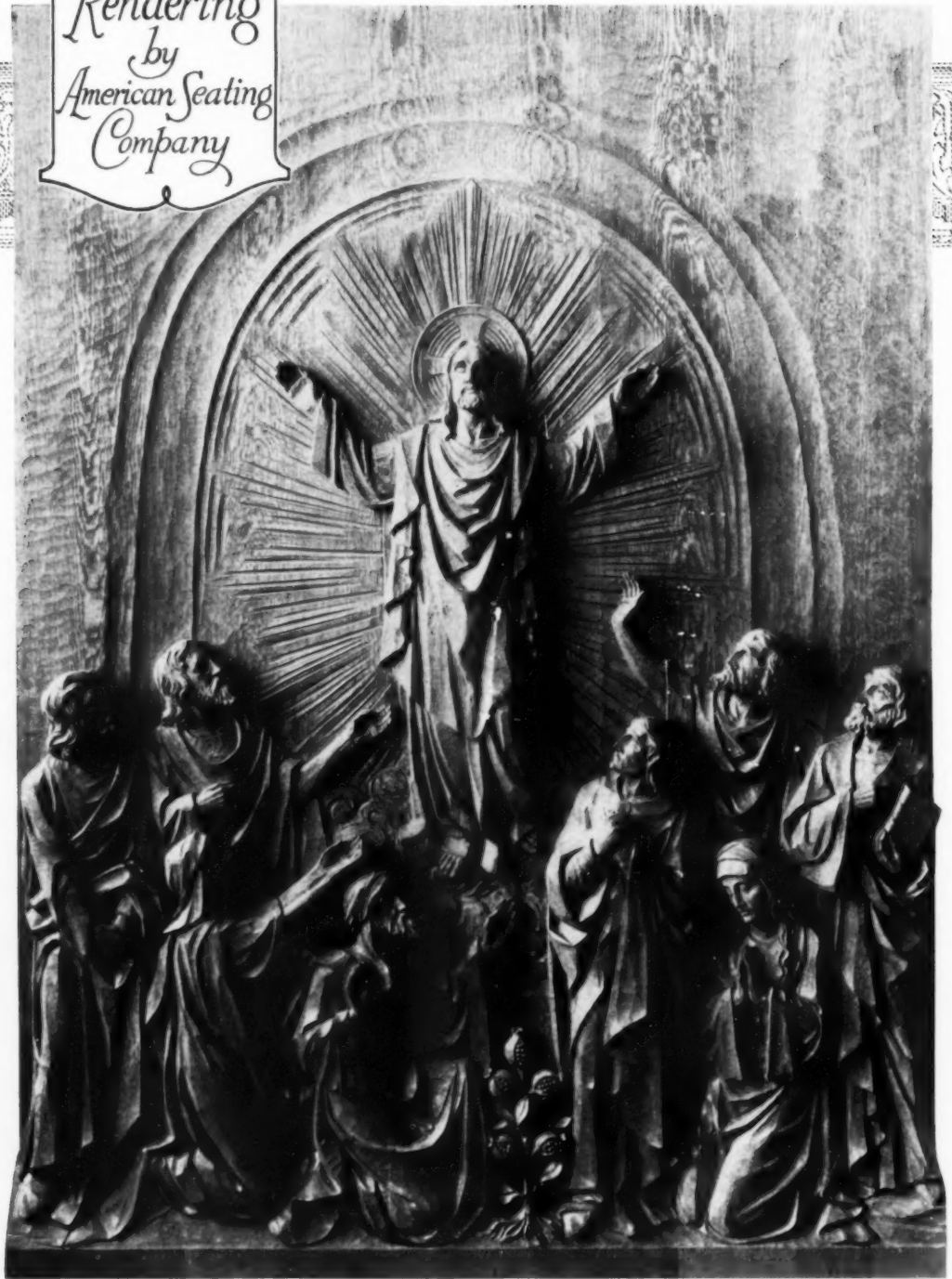
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ALFRED HOPKINS, *Architect*

Plaster Ornament! Just a Detail, but—

a detail that has transformed into a distinctive home many an otherwise ordinary house.



WHY this steady drift toward plaster ornament? Pick up any of the architectural magazines or such periodicals as *House and Garden*, and notice how, in interior after interior, plaster ornament is being used with amazing effect in all types of dwellings—small as well as large.

In some cases, there is just a suggestion—perhaps a pediment over a doorway, a tiny medallion repeated in the walls of one or two rooms, perhaps an interesting cornice or molding. Often it is an entire ceiling in rich period design.

Of course there is nothing new in plaster as a decorative medium. The real reason for its present popularity lies in the marvelous effects it can create at only slight additional expense.

Today the six firms listed below, in the interest of creating a wider appreciation of plaster ornament, are acquainting the most discriminating section of the public with the real possibilities of this art material. Pre-eminent in the field stand these six firms, through whose catalogues correct plaster ornament is quickly available at moderate cost in all parts of the country.

Models for thousands of designs, ranging in period from Classic to Modern, are always on hand—a wealth of ornamental material from which to choose. Each of the firms, too, employs draftsmen trained in the use of ornamental plaster, and always ready to cooperate in developing new designs and adaptations, and indicate costs.

Architects and Decorators are invited to write to each of the six firms listed below for their individual catalogues.

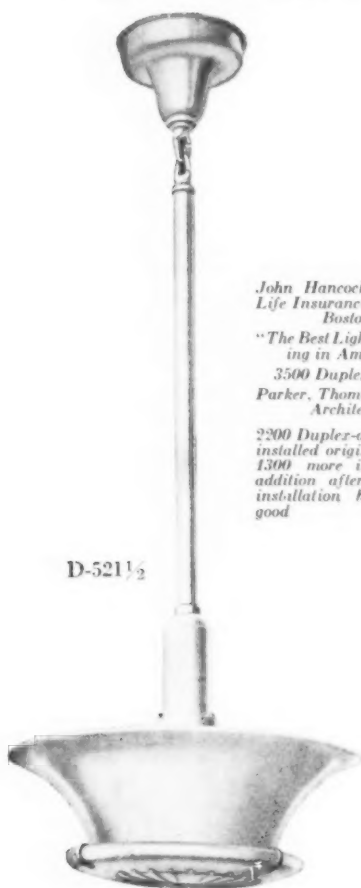


PLASTER ORNAMENT for PERIOD DESIGN

Chicago—THE DECORATORS SUPPLY CO. Archer Avenue and Leo Street	New York—JACOBSON & COMPANY 230-241 East 44th Street
Cleveland—THE FISCHER & JIROUCH CO. 4821 Superior Avenue	Philadelphia—VOIGT COMPANY 1743-40 N. Twelfth Street
Detroit—DETROIT DECORATIVE SUPPLY COMPANY 4240 14th Ave.	Chicago—ARCHITECTURAL DECORATING COMPANY 1600-12 South Jefferson Street

P. W. FRENCH & COMPANY, INC., *Decorators*

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D-521 1/2

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 Automobile Club of Southern California, Los Angeles
 Massachusetts Mutual Life Insurance Company, Springfield, Mass.
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 Buffalo General Electric Co., Buffalo, N. Y.
 John Hancock Mutual Life Insurance Building, Boston
 Hershey High School, Hershey, Pa.
 Independence Indemnity Building, Philadelphia
 Seville Biltmore Hotel, Havana, Cuba
 City Savings Bank Building, Albany, N. Y.
 International Mercantile Marine Building, New York
 Los Angeles Biltmore Hotel, Los Angeles
 Strauss Building, Chicago
 Alhambra High School, Alhambra, Calif.
 Masonic Memorial Hospital, Utica, N. Y.
 The Macmillan Company, New York
 General Motors Building, Detroit
 Matson Navigation Building, San Francisco
 Mayflower Hotel, Washington, D. C.
 La Salle Institute, Chicago
 Union Trust Company, Cleveland
 Connecticut General Life Insurance Company, Hartford, Conn.

DUPLEX-A-LITE DIVISION
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 Send me your booklet on the Duplex Lighting System.
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"The Best Lighted Building in America"

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Parker, Thomas & Rice, Architects.

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Duplex-a-lite Shadows are Luminous *Just Enough for Definition*

DUPLEX-A-LITE illumination is a balanced blend of 20 per cent direct and 80 per cent indirect light. The psychological necessity for an apparent source of light is satisfied, but the entire ceiling becomes the distributing agent for the majority of the light. Hence there are no *undesirable* shadows. There is, however, a luminous shadow—just enough to give definition to objects.

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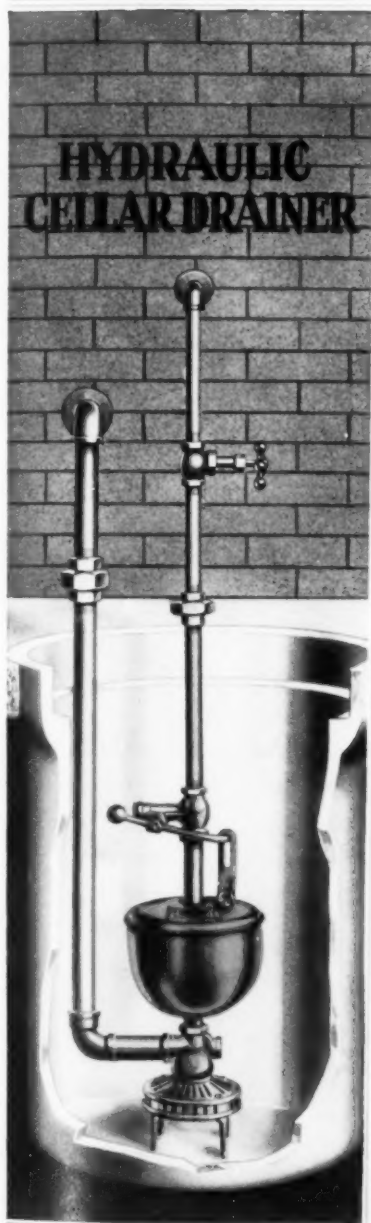
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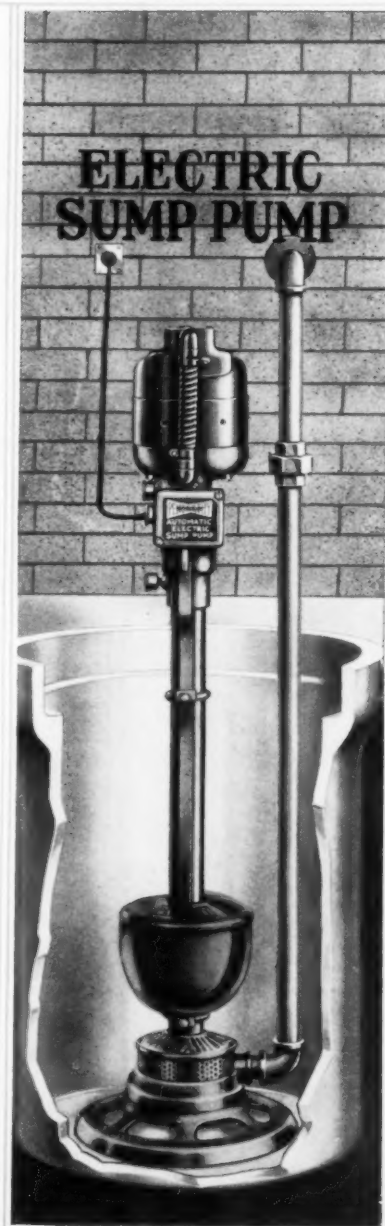
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*Quality is particularly stressed
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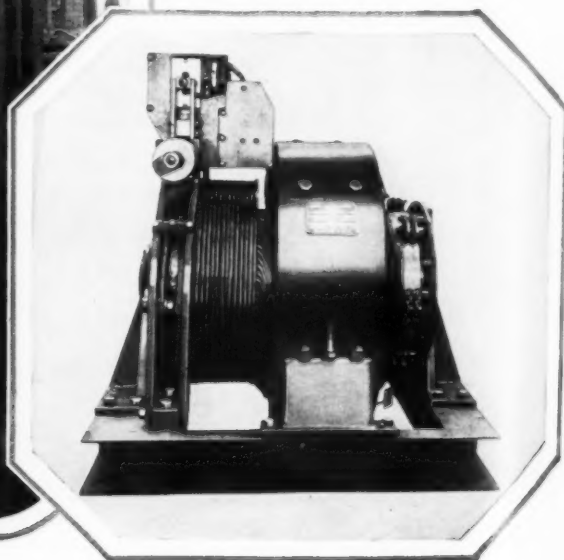


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ESTABLISHED IN 1886 **DETROIT** **CANADIAN PLANT WINDSOR, ONT.**



4

*Lake-Michigan Building, Chicago.
Elevator equipment supplied by
Pitt Engineering Company. Archi-
tects—Alfred S. Alschuler, Inc.*



G-E gearless elevator motor

GENERAL

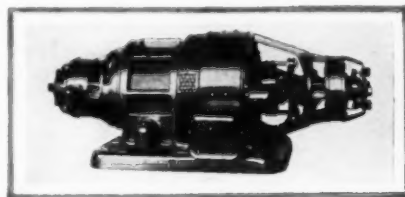
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Outstanding Contributions by General Electric to Elevator Control

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- 4 A simplified and accurately responsive system of *automatic leveling* for building owners who require the highest grade of elevator service

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An original contribution to elevator operation is the G-E system of automatic speed regulation. A simple, sturdy, rotating device is secured to the generator of the variable-voltage set, without added relays. This system, applied to high-speed gearless traction elevators, obtains both the maintenance of high



Variable-voltage set

uniform speed under full load—insuring the handling of maximum traffic during rush periods—and at the same time automatically compensates for gravity and momentum at landing speeds, so as to produce constant drift and make accurate landings possible with simple car-switch control.

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Pacific Elevator Co., San Francisco

Pitt Engineering Co., Chicago

Warner Elevator Manufacturing Co., Cincinnati

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SALES OFFICES IN PRINCIPAL CITIES

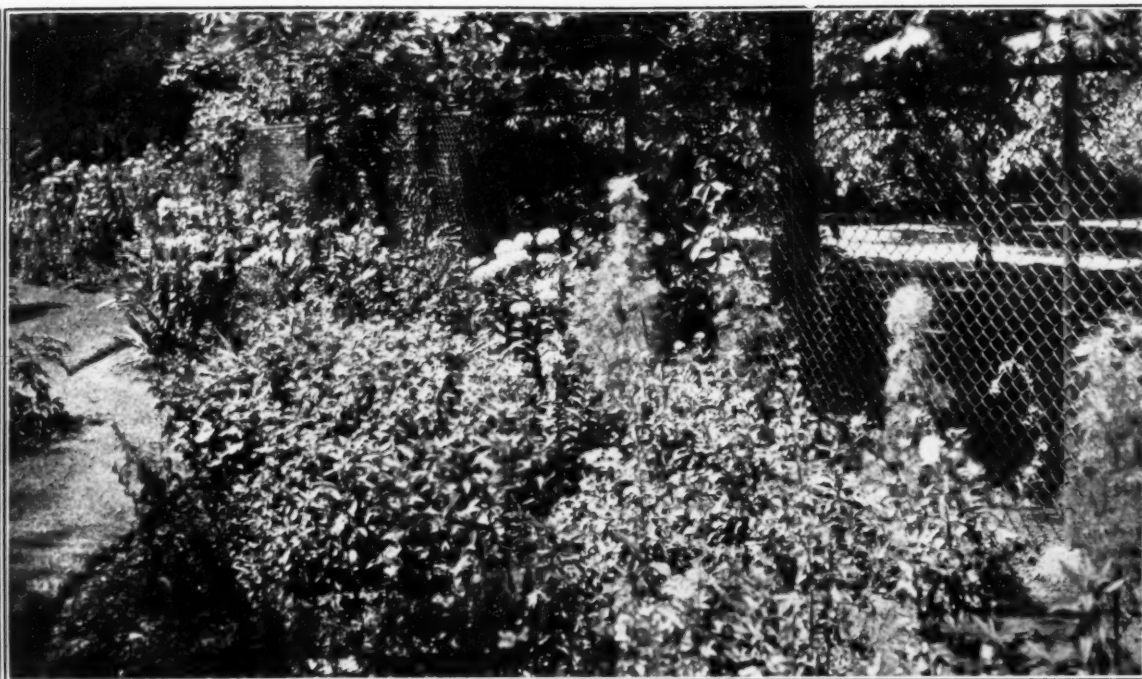
237-29



The New Von Duprin Catalog Is Ready

The largest and finest catalog we have ever issued—containing a wealth of helpful matter—has just been mailed. While we have tried to put it in the hands of every architect doing work which utilizes panic devices, omissions are almost inevitable and if, by any chance, you have failed to receive your copy, a word to us will bring it by return mail.

VONNEGUT HARDWARE CO.
Indianapolis, Indiana



ROOT & HOLLISTER, Lds. Archts.

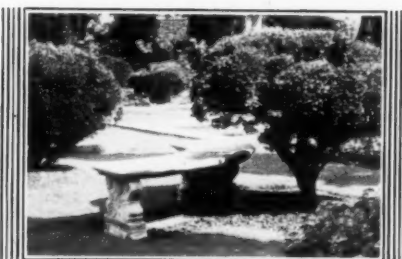
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Architects and amateur garden lovers rarely have been so rash as to plan a garden without some thought of fence protection. But many times their choice of fencing has been based on personal preference for one type or another, rather than the ultimate purpose of invisible protection for a matured landscape planting.

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*Permanency of beauty on the wood trim in the
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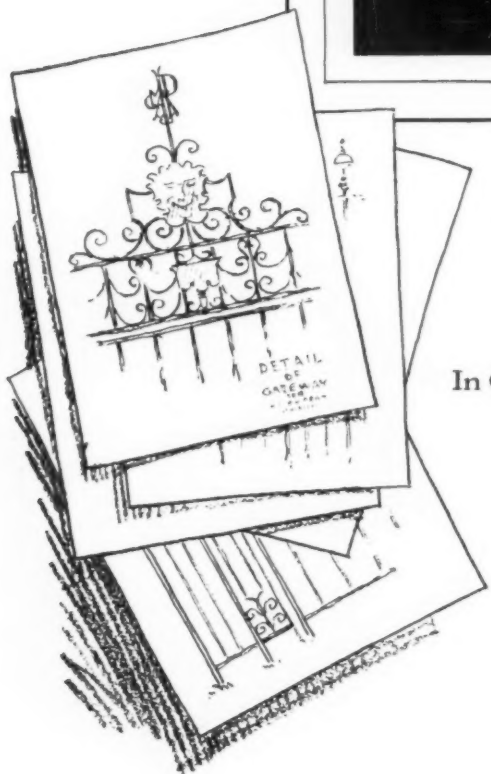
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Sisal fibre re-enforced both ways and covered with a double layer of tough kraft outside, Sisalkraft is so strong you can hardly tear a small sample across.

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The double layer of finest asphaltum provides effective waterproofing under the severest conditions of use. Sisalkraft holds water for three or four months by actual test.

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Both sides of a sheet of Sisalkraft are clean, tough kraft paper, easy to handle, safe to use even as a protection to finished floors and furniture when decorating.

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See Sweet's Architectural Catalog, pages 190-191

SISALKRAFT

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Masterbuilt Metallic Hardned
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From unretouched photograph of floor in station of Penna. R. R., Cleveland, Ohio

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"The Pennsylvania started this practical test in 1912 when they laid a plain cement floor and a Metallic Hardned floor side by side in their Cleveland station. The hardned portion gets twice the traffic the plain does, yet see the difference." . . . Extract from page six of the new book "PLAIN TALK ABOUT CONCRETE FLOORS," just off the press.

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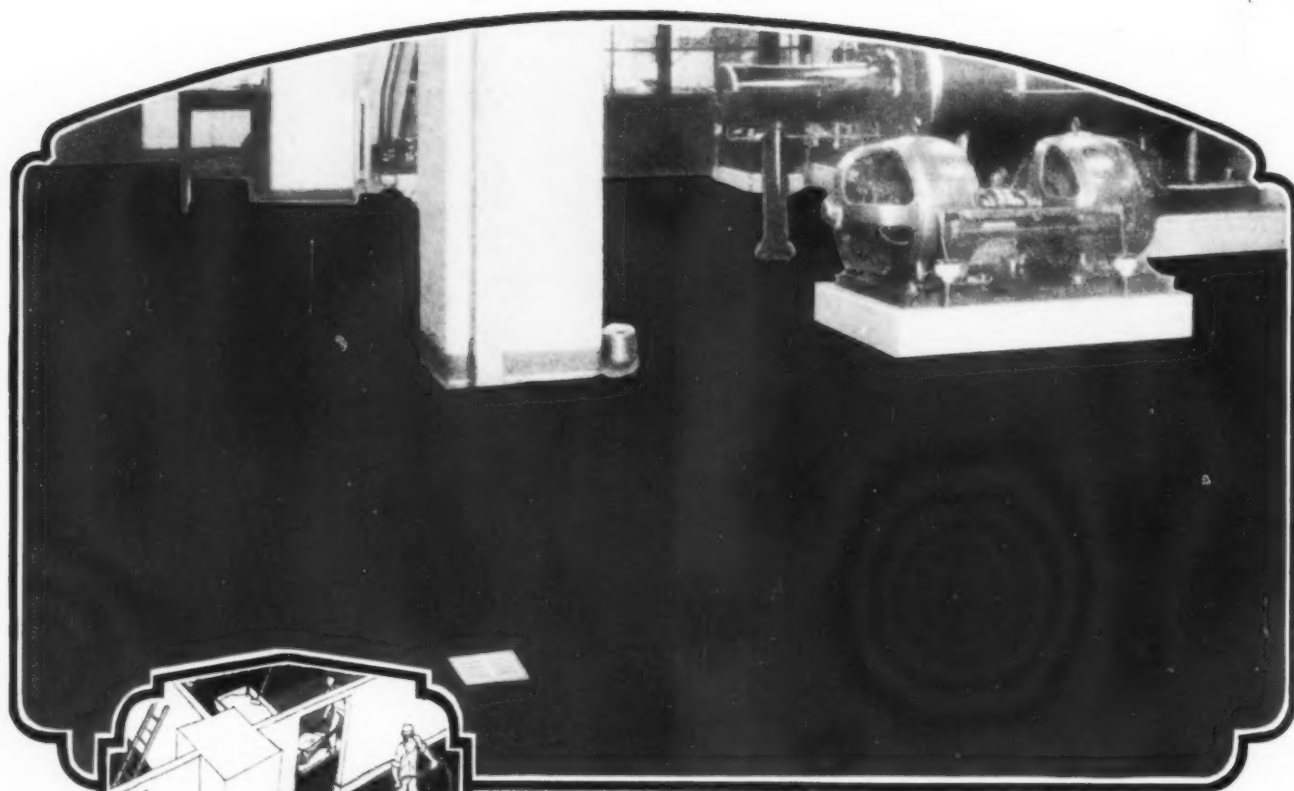
Before specifying another floor send for a copy of this book, sent upon request to architects, engineers, contractors and building owners and managers.

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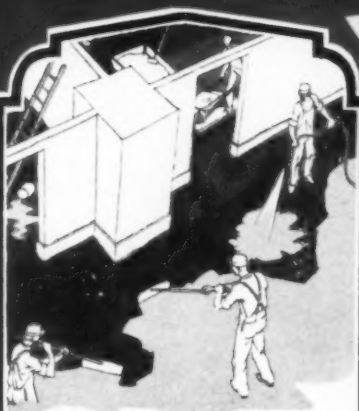
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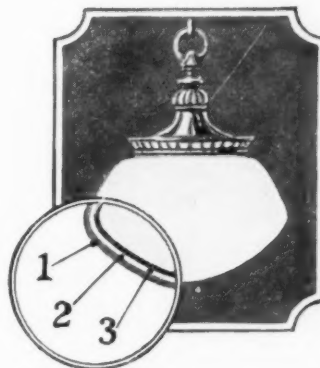
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Marb-L-Cote mixes in cold water, applies easily and covers well. Immediately after application it may be textured. See photo at left. It is remarkably workable, does not stick to hands or tools during texturing.

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The Architectural Record, June, 1928



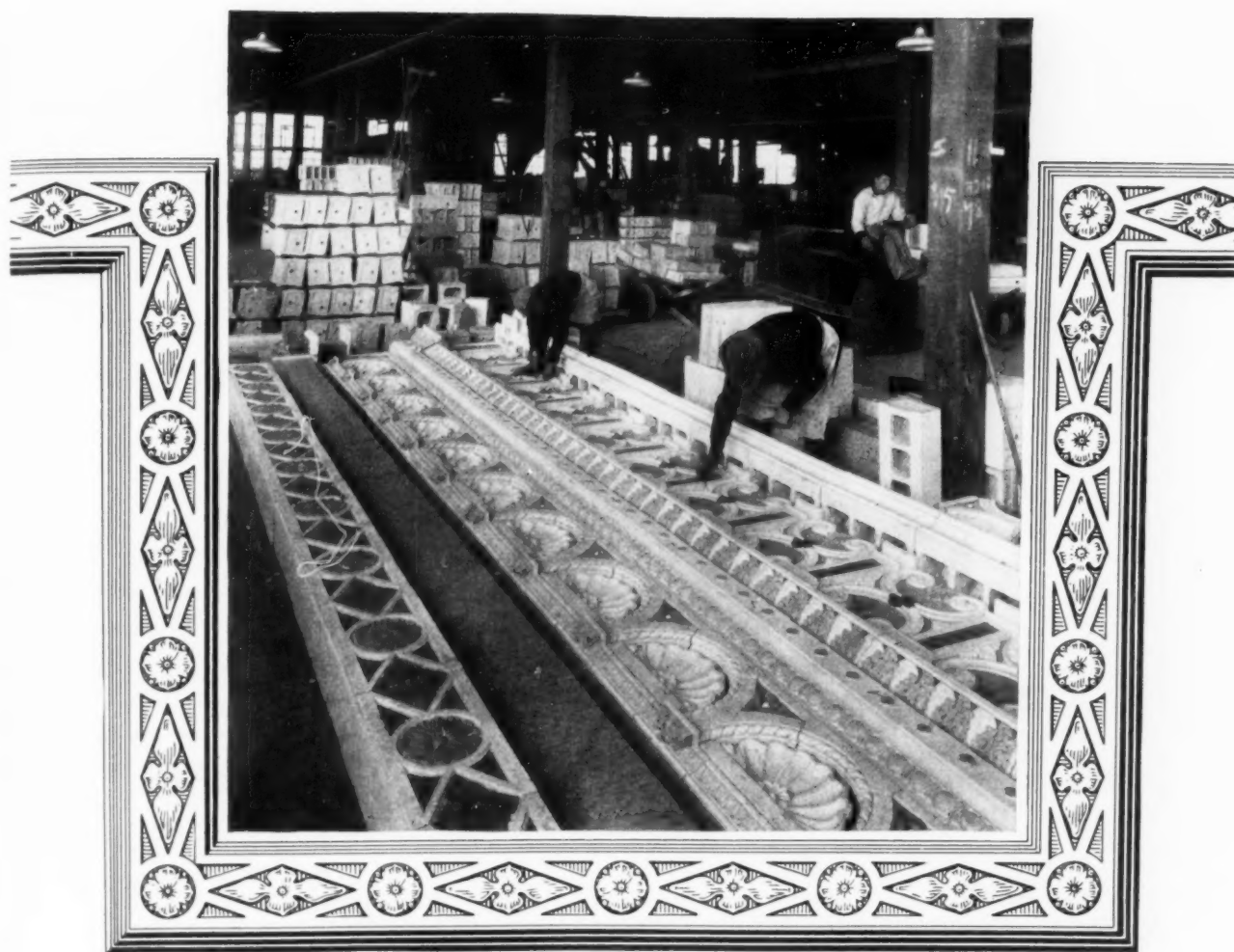
Recommend the reliable
Kelvinator Electric Refrigerator . . . it's a real service
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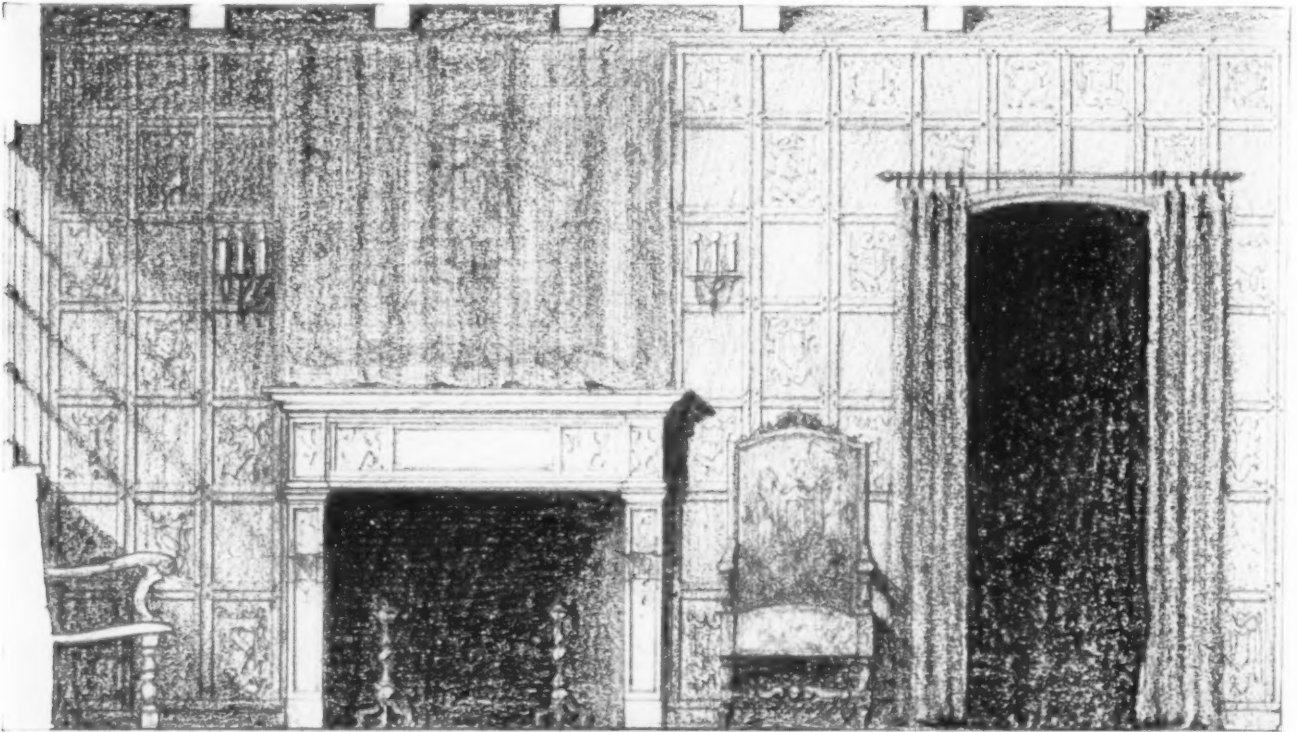
PRECISION *the* KEYNOTE

PICTURED here is a section of The Northwestern Terra Cotta Company's fitting department. With the accuracy of a master mosaic, separate units of terra cotta are fitted to form the pattern designed by the architect. When the numbered pieces of terra cotta leave the factory they carry the assurance of precision in fit.

Prior to shipment, every piece is carefully matched and irregularities in shape corrected. Great care is used to effect desired color harmony and to follow faithfully the design of the architect. This unremitting attention to detail has been and is an important factor in establishing and maintaining Northwestern leadership.

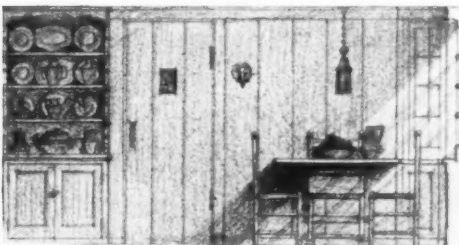
THE NORTHWESTERN TERRA COTTA COMPANY
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NORTHWESTERN TERRA COTTA

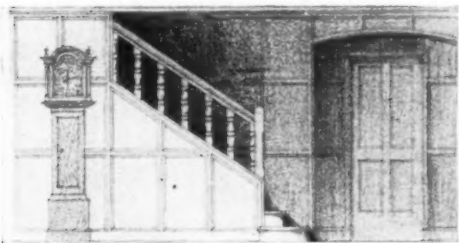


H. Roy Kelley, Architect, Pasadena, California

Baronial splendor at moderate cost



All woodwork in this pantry is of Sitka Spruce. Sitka Spruce is odorless and tasteless so it is used wherever foods are kept.



This hallway is paneled in West Coast Hemlock. One coat ground, three coats rub-varnish, hand rubbed to a dull finish.

It is really remarkable what beauty the West Coast Woods Architectural Competition uncovered in the treatment of the four giant softwoods of the Douglas Fir region:

Douglas Fir • West Coast Hemlock

Western Red Cedar • Sitka Spruce

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We will be glad to send you, without charge, a brochure of the designers' sketches and construction suggestions for this and many other of the designs submitted in the West Coast Woods Architectural Competition, together with a book describing the four outstanding woods of the Douglas Fir region. Address West Coast Lumber Bureau, 216 Mt. Hood Building, Longview, Washington.

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The name should be one that is easy to pronounce, easy to remember, one that suggests the article and one that would appeal to the public. It must be dignified and appropriate for a high grade, polished, plate glass.

The design need be only a rough suggestion of a type of lettering or some distinctive way of using the name in a trade mark form. The crudest pencil sketch will be good enough to show the idea. No importance will be placed on the finished appearance of the sketch.

Only architects and those employed in their offices are eligible but each may send in as many suggestions as he wishes.

\$1000 in cash will be paid to the one sending in the name and design selected. If the winning name-sketch is sent in by more than one contestant duplicate prizes will be awarded to each.

Contest Closes July 1st, 1928

Judging and selection will be made as soon as possible after July 1st.

The winning name-sketch will be selected from twenty which appeal to the judges as being the best after submission to the Carnegie Institute of Technology for a psychological test.

This psychological test will be based on association, memory value, descriptive value, distinctiveness and pronunciation.

Announcement of the selection will be made in an early issue of this publication.

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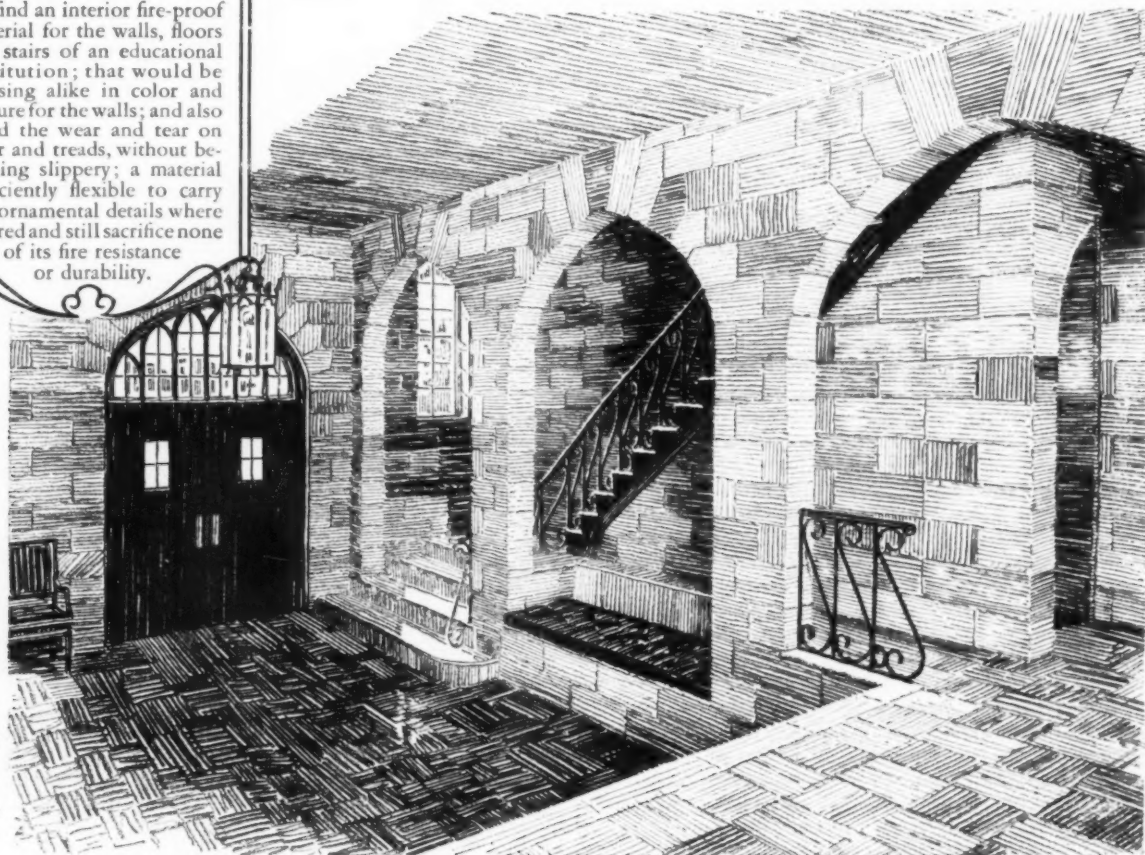
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RICHARD D. CURRIER.

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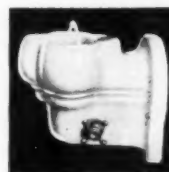


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No. 605

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No.
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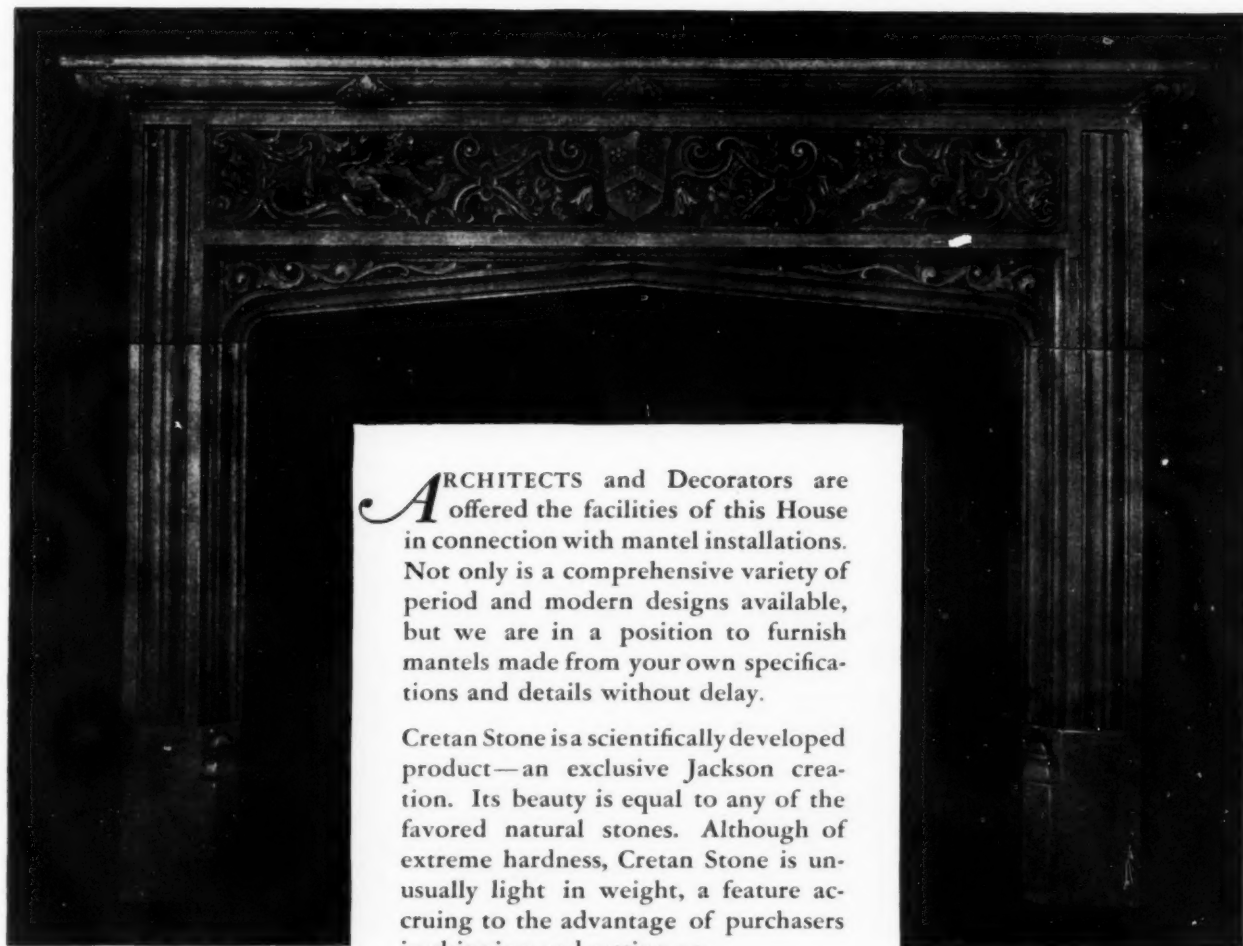
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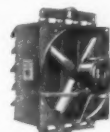


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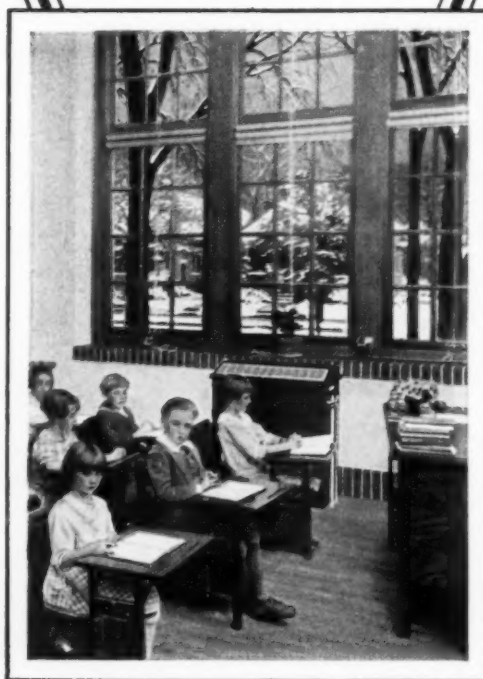
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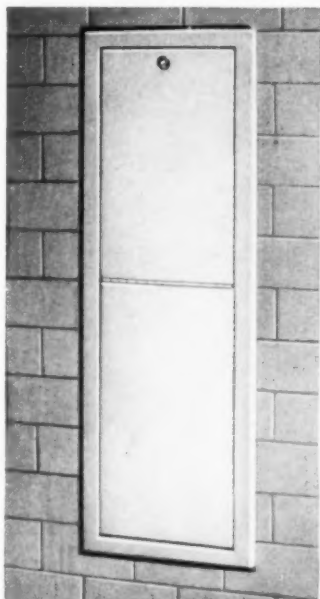
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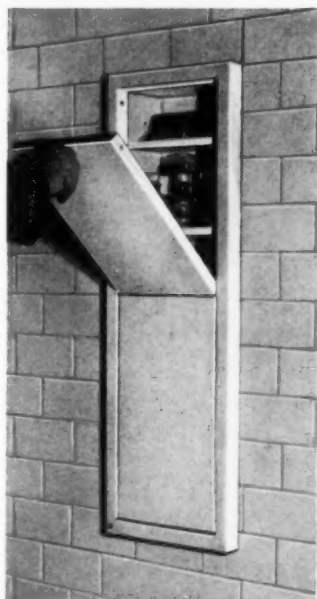
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3. **Looking Ahead in Business.**—(Published in 1925.) A discussion in brief outline of the relation of statistics to business planning.
4. **Building Contracts and Business Movements.**—(Published in January, 1927.) A paper presented before the American Statistical Association, accompanied by charts showing that construction contracts anticipate movements of the stock market, of automobile production and of general business activity, and also by charts showing that investment market curves are the only ones that anticipate construction trends.
5. **Trends of Construction and Construction Costs.**—(Published in December, 1927.) Reprinted from *Real Estate Finance*, the year book of the Mortgage and Finance Division of the National Association of Real Estate Boards. A brief discussion of the factors influencing expansion of construction activities; contains a table of index numbers giving comparative construction costs as between 44 large cities.
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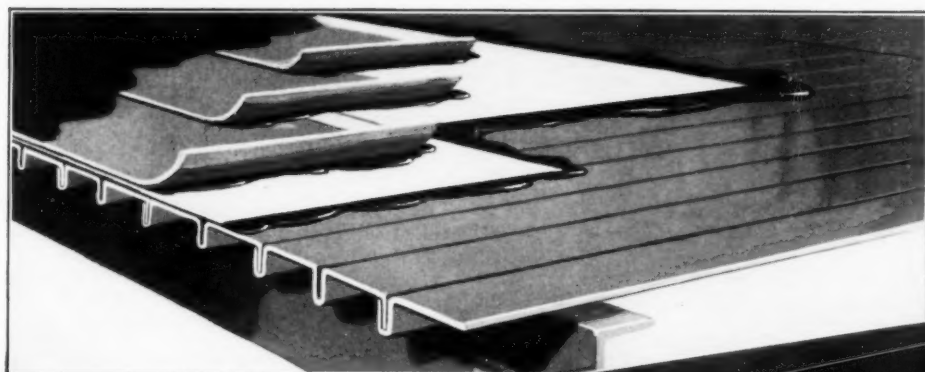
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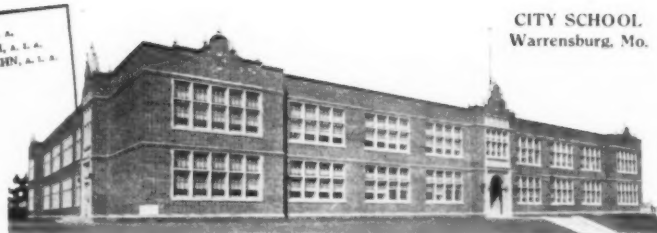
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By *J. H. Felt*

JHF:M



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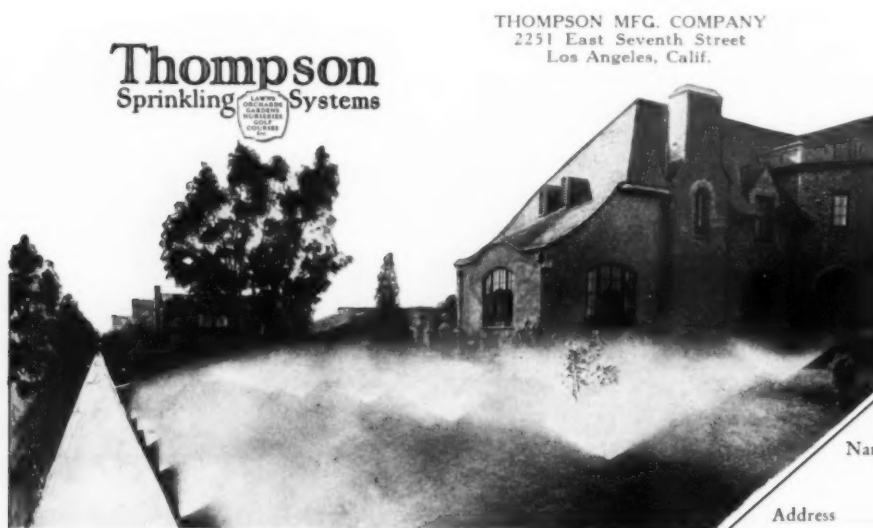
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We want to thank you for your generous cooperation with the Dodge reporters in our national survey of architects offices - a survey which has produced definite and conclusive results of interest and importance. Complete findings of the survey (covering over 7,000 offices) will be forwarded later to those who have requested them.

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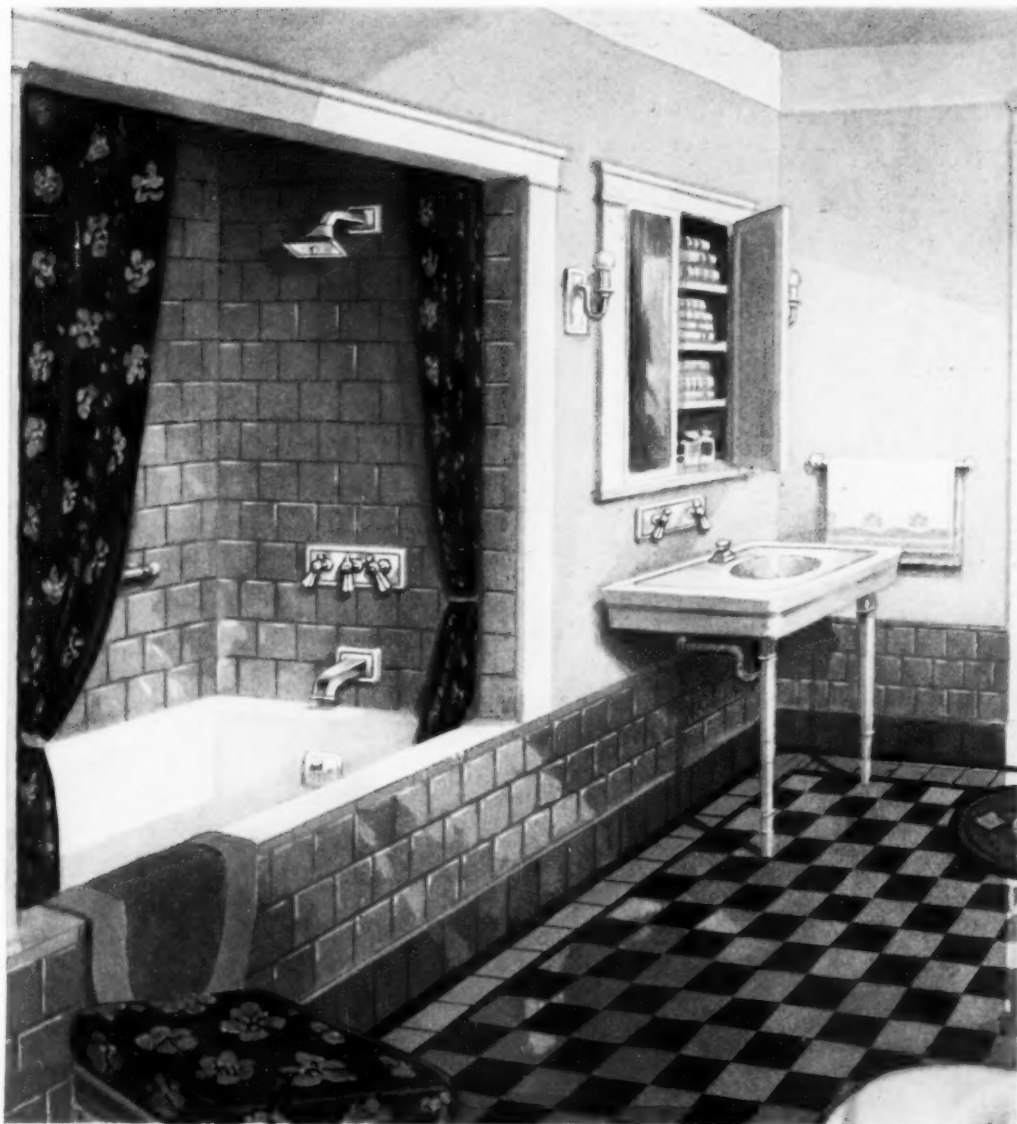


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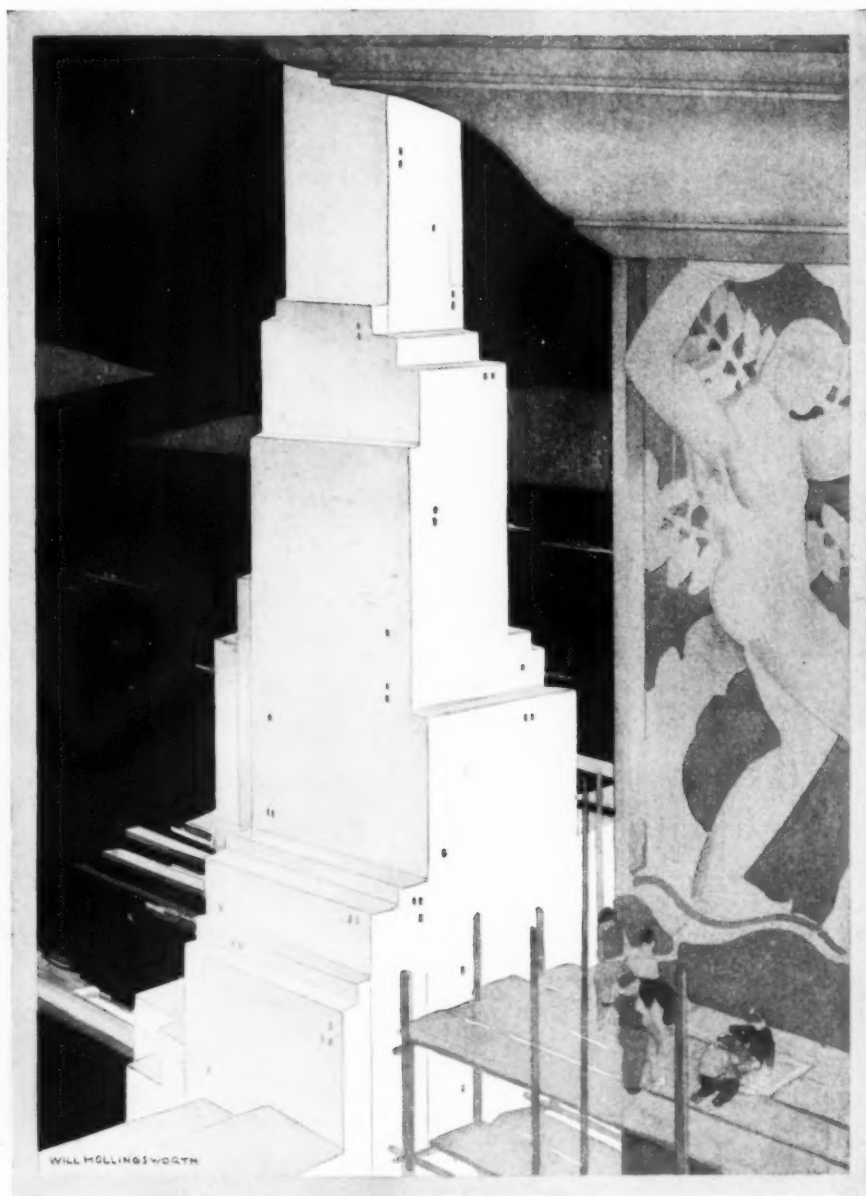
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The Architectural Record, June, 1928



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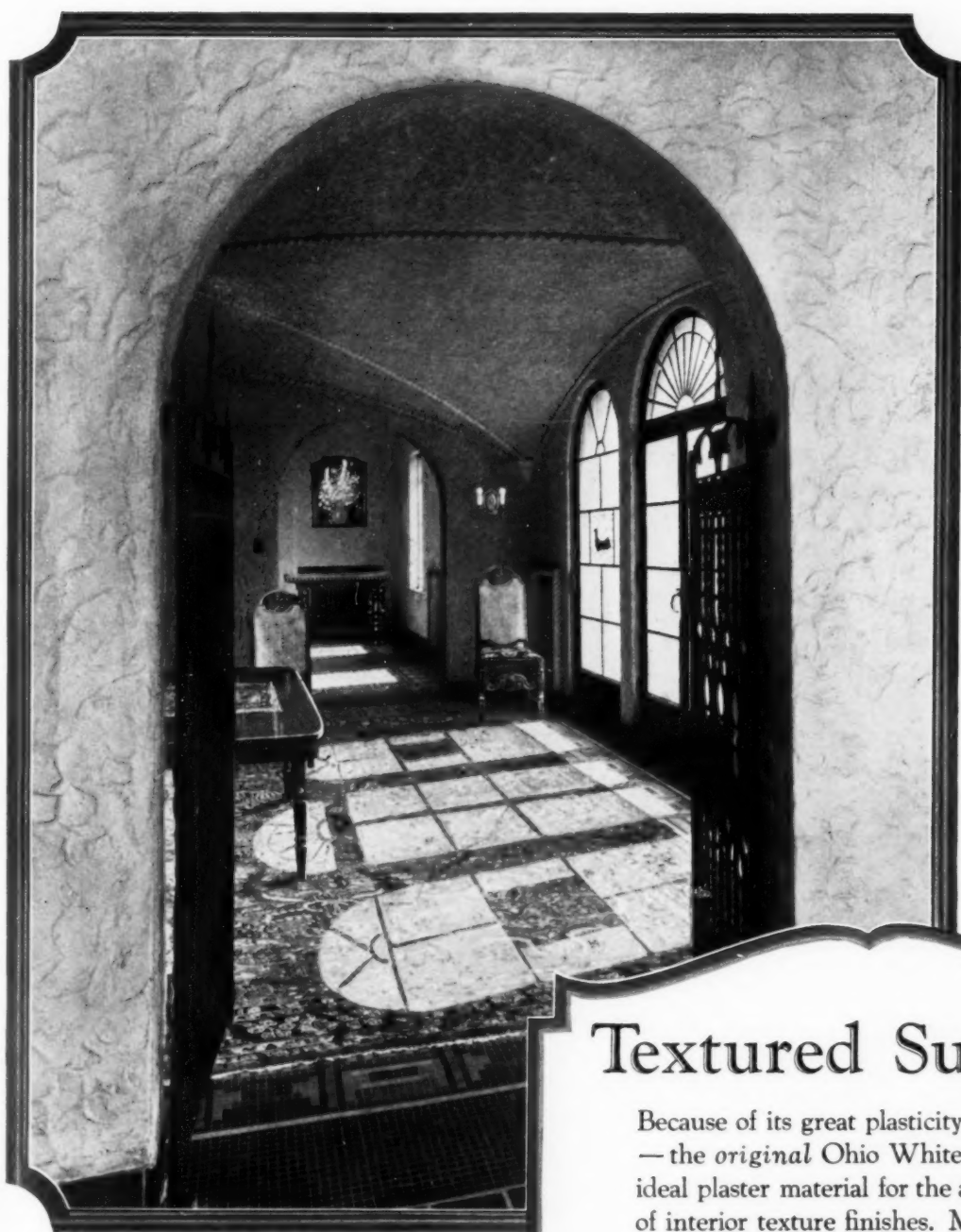
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The Architectural Record, June, 1928



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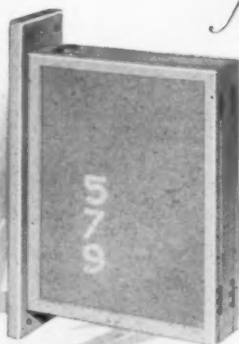
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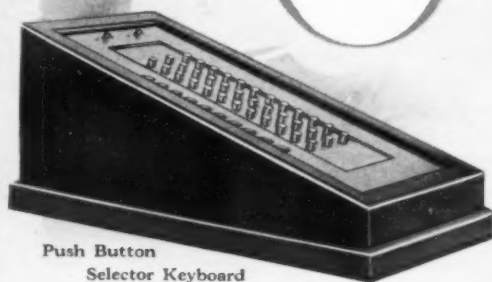
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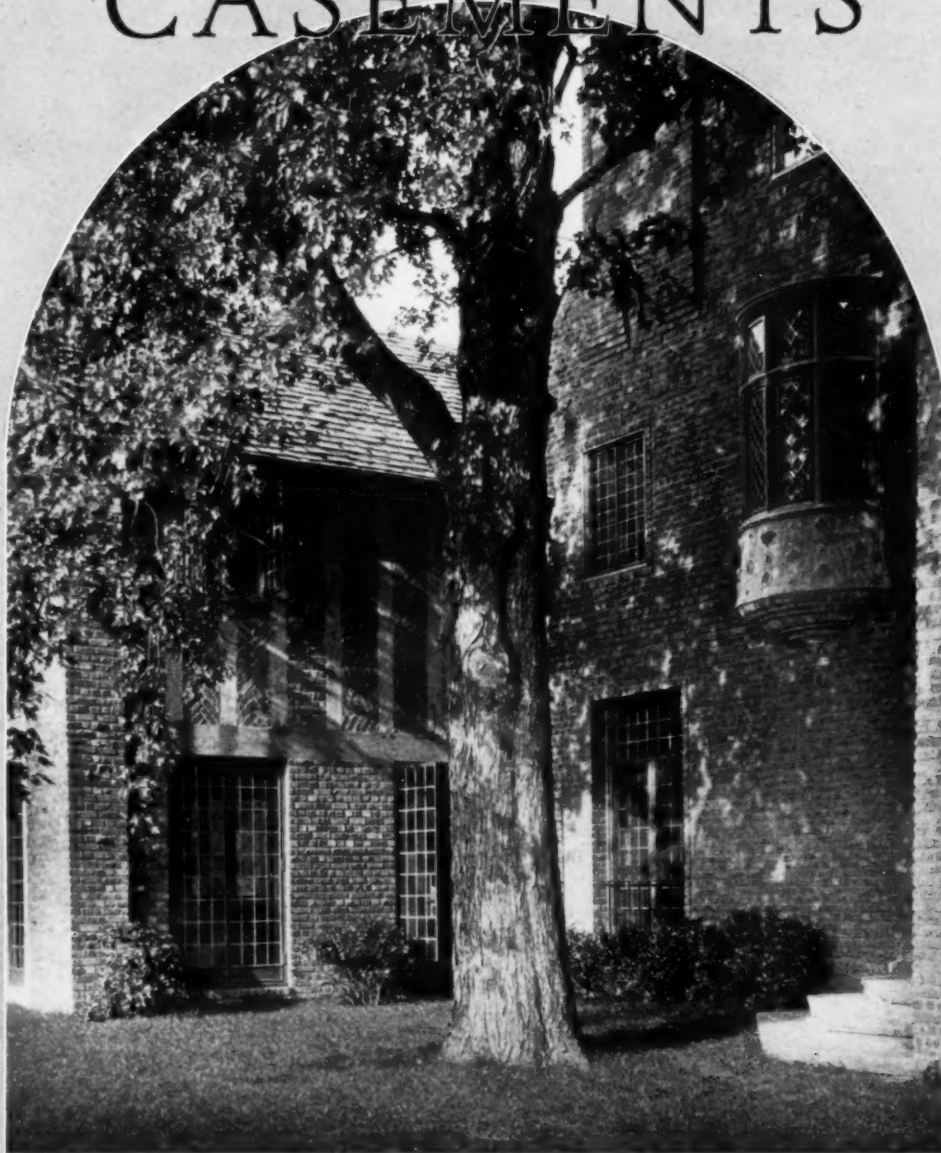
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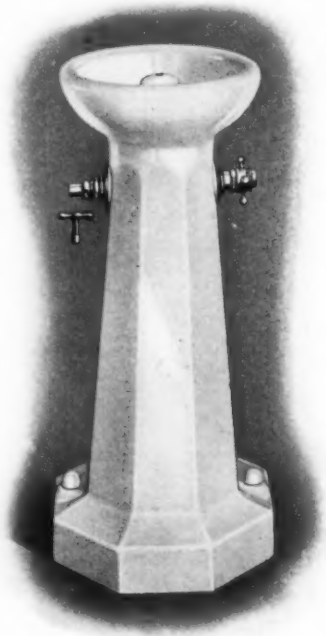
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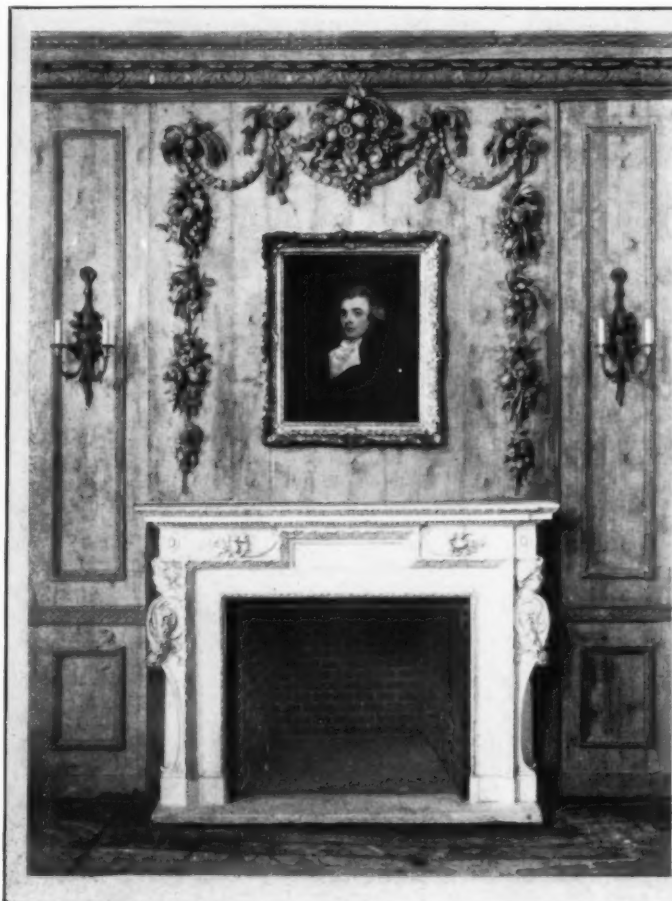
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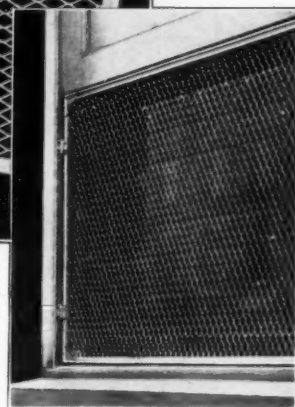
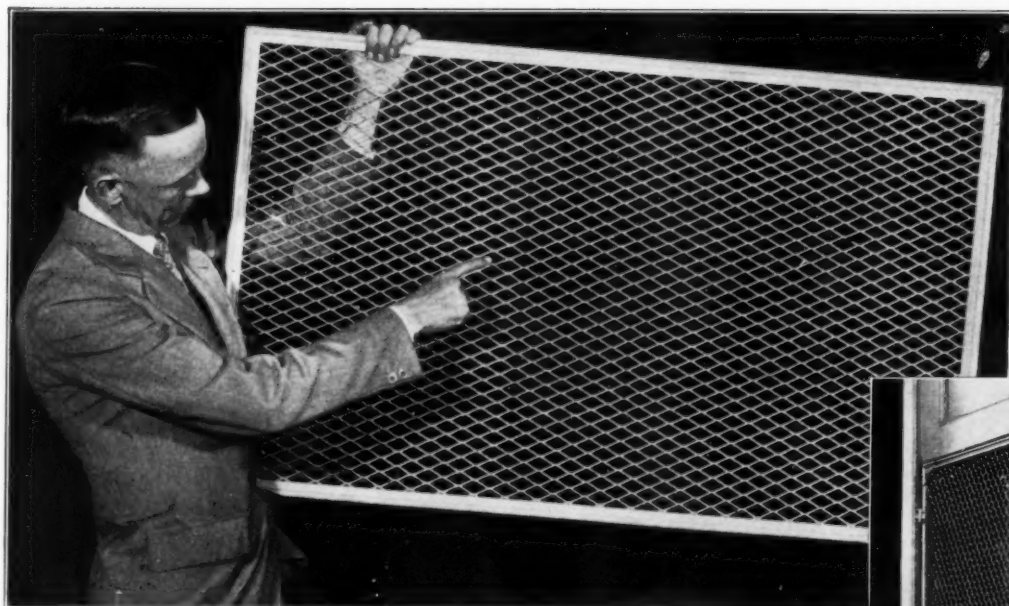
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Steelcrete Diamond Mesh is supplied in large flat sheets. Any size is adaptable to framing with Steelcrete Frame Bar and Accessories. This insures one high quality in the finished product, whether it be window or transom guard, door guard, railing filler, skylight protector, drying tray or truck panel.

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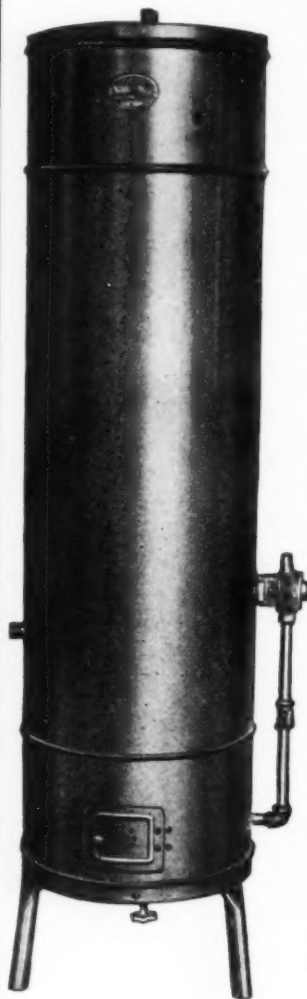
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New— The Super-Aquatherm

(Patented Nov. 8, 1927)

This latest development of the Dahlquist Mfg. Company is of vital interest to architects who desire to specify for their clients the last word in hot water conveniences. The new Dahlquist Super-Aquatherm solves all of the hot water supply problems of the household. Consider these important points:



100% Automatic—

Gas burner automatically controlled by thermostat which keeps the temperature of the storage water constant at all times.

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The storage water boiler is completely insulated, has no outside coils. All of the heat is used for heating the water in the boiler.

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The Super-Aquatherm is attractively finished to harmonize with its surroundings. It may be placed anywhere without a discordant note.

Low Price—

The Super-Aquatherm although complete in every detail, is actually lower in price than the ordinary type of copper hot water heater.

Easily Installed—

The Super-Aquatherm requires the simple connection of three pipes, a simple job for any plumber.

Three Sizes

The new Super-Aquatherm is made in three sizes to suit all types of modern apartments or residences.

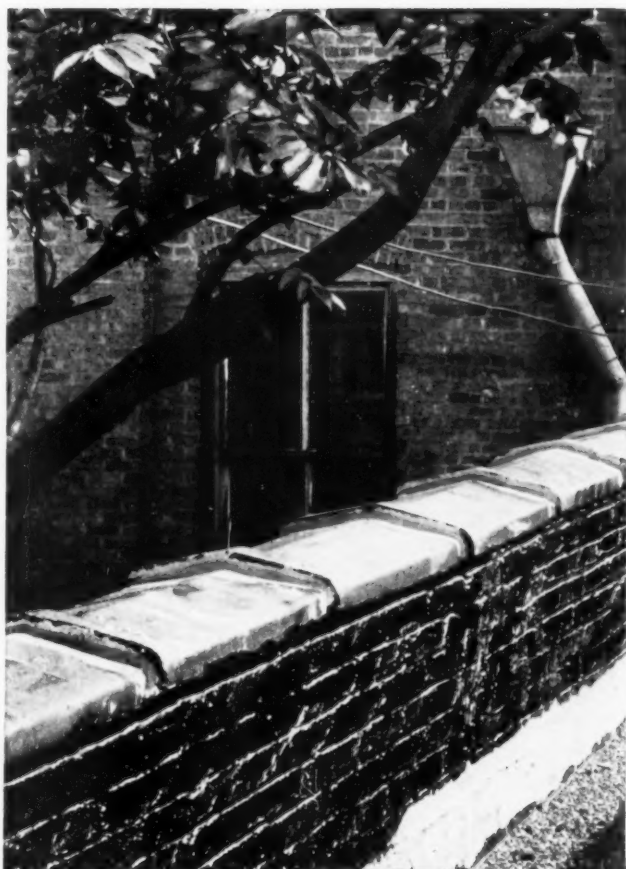
The No. 20 (capacity 20 gallons) is large enough for the small home or apartment with one bathroom, kitchen, and laundry. Price, complete ready to install, \$100.00. The No. 30 (capacity 30 gallons) will efficiently supply the medium sized home containing two bathrooms, laundry and kitchen. Price, complete ready to install, \$150.00. The No. 40 (capacity 40 gallons) is designed for the larger home with additional outlets. Price, complete ready to install, \$200.00.

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"Intermediate" Wire contains 25% rubber.

"30%" Wire contains 30% rubber.

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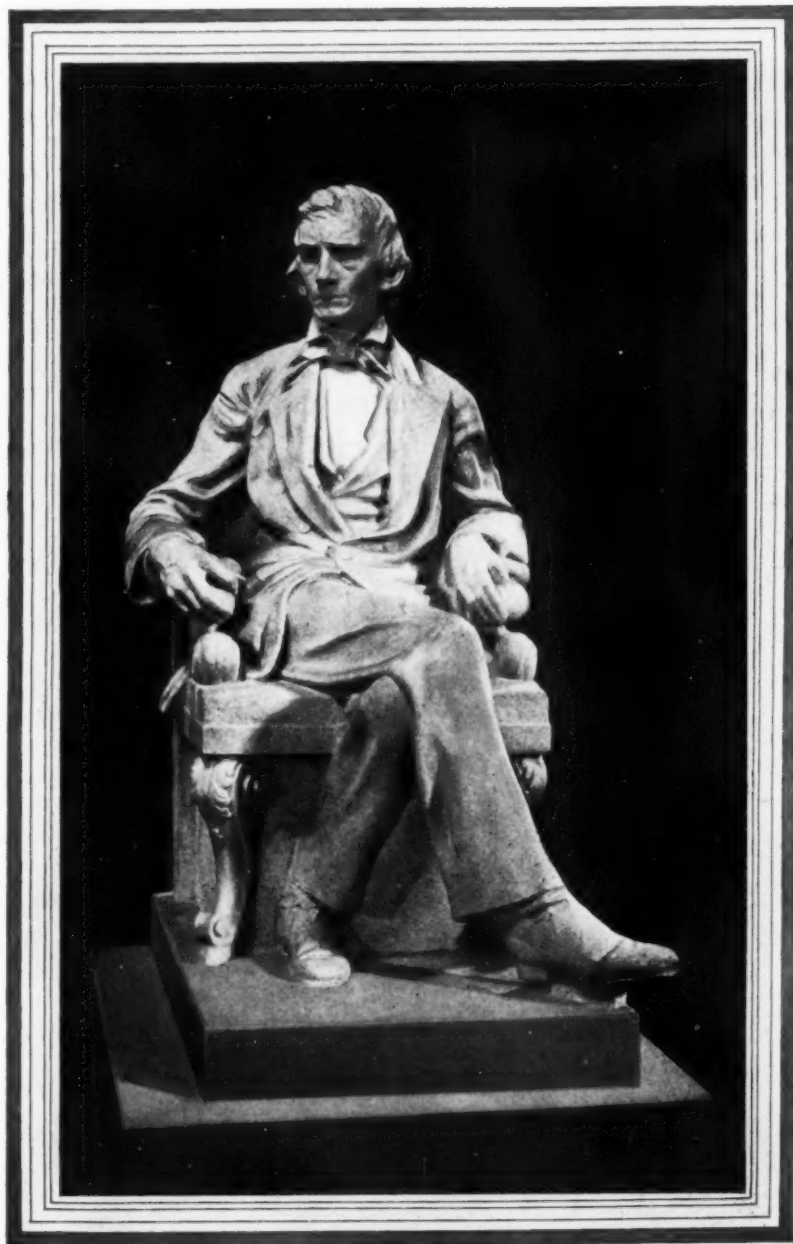
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The Architectural Record, June, 1928

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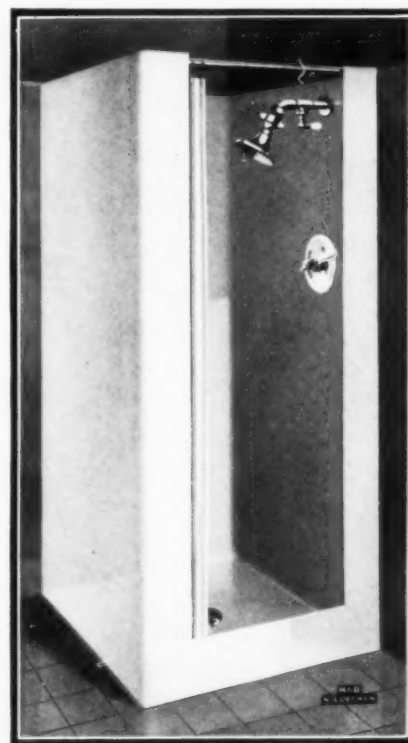
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Write for Bulletin R. 120

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MADE IN U.S.A.

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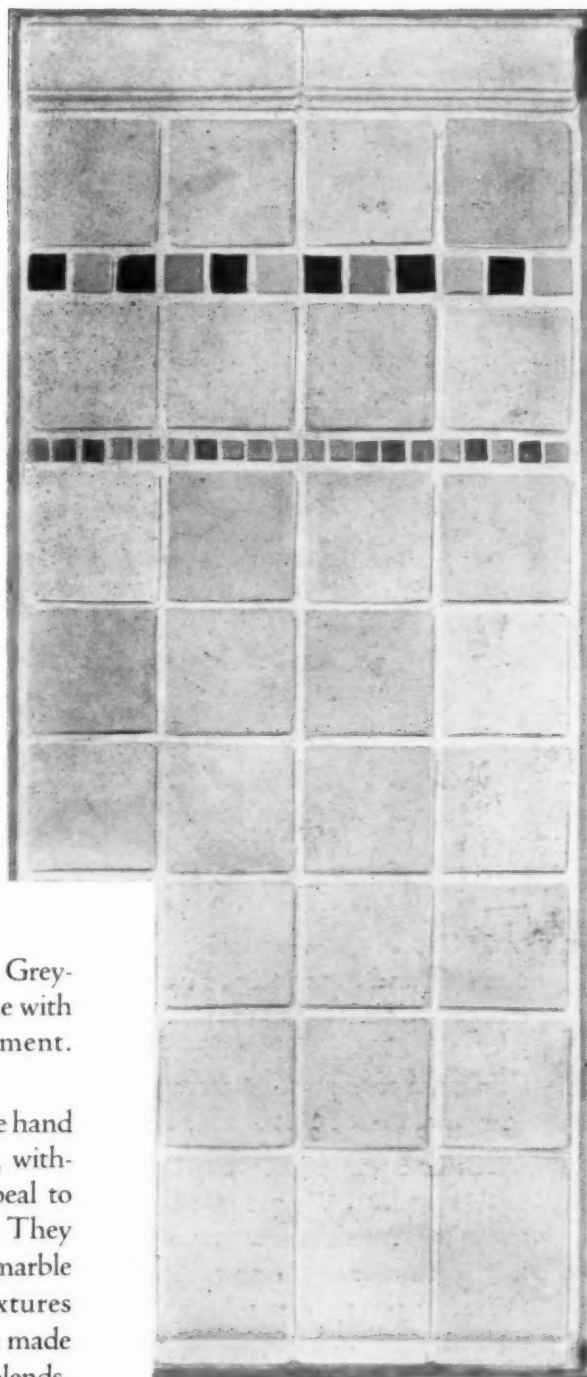
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The Architectural Record, June, 1928

121



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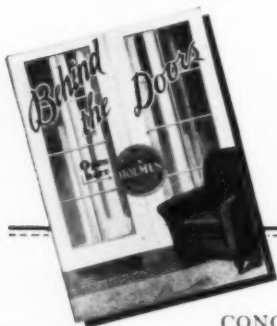
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The Architectural Record, June 1928

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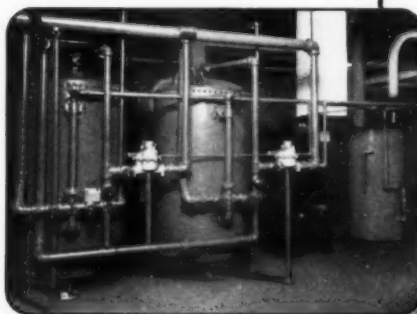
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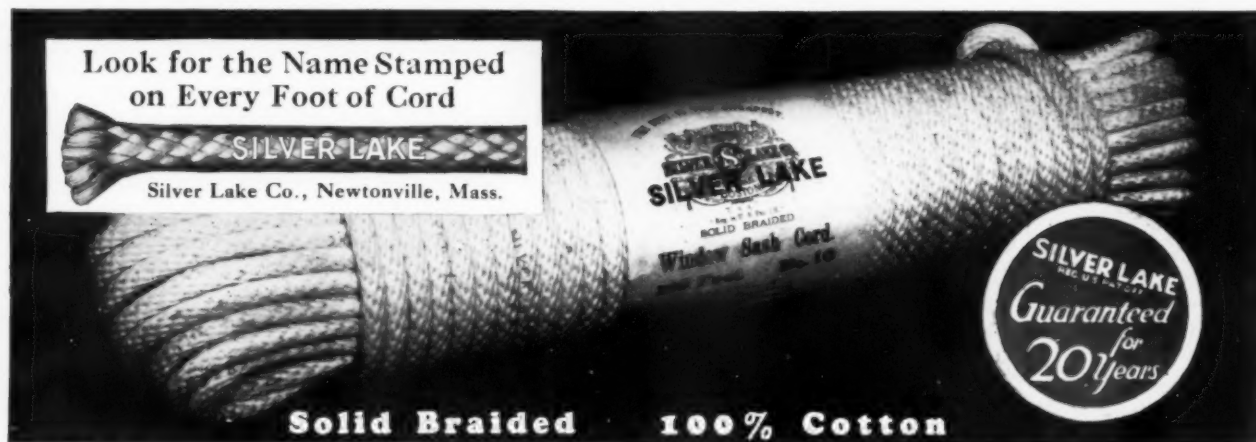
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State of New York, County of New York, before me, a notary public in and for the State and county aforesaid, personally appeared J. A. Oakley, who, having been duly sworn according to law, deposes and says that he is the Business Manager of THE ARCHITECTURAL RECORD, published by F. W. Dodge Corporation, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 4111, Postal Laws and Regulations, printed on the reverse of this form, to wit:

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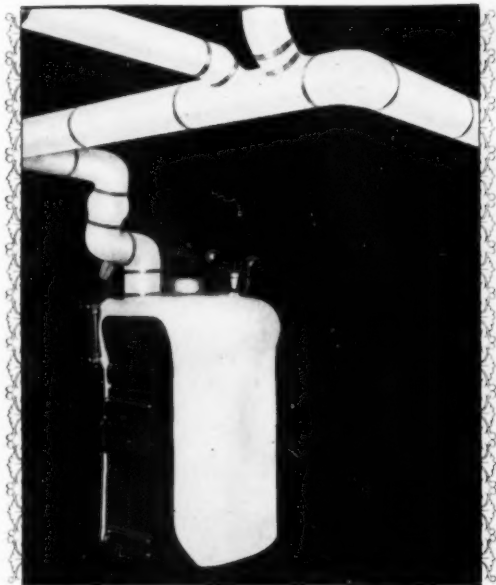
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J. A. OAKLEY, (Signature of business manager)

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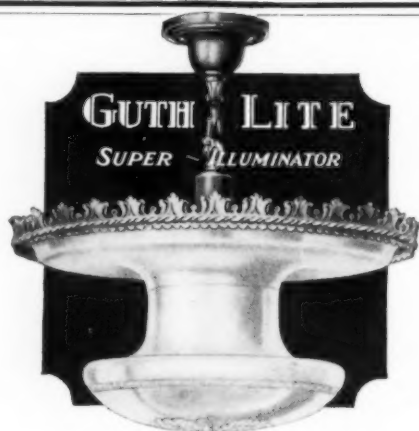
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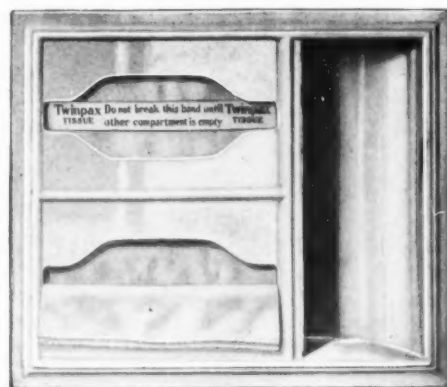
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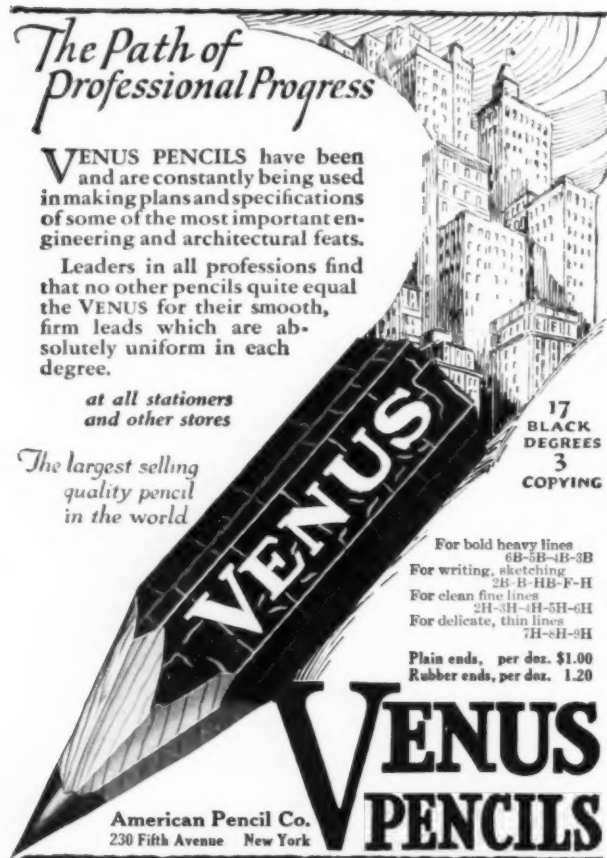
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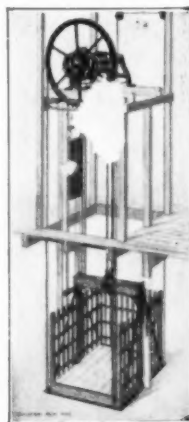
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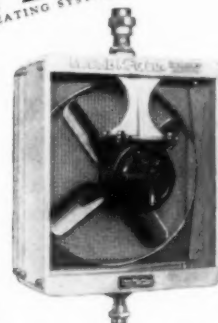
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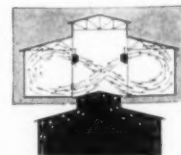
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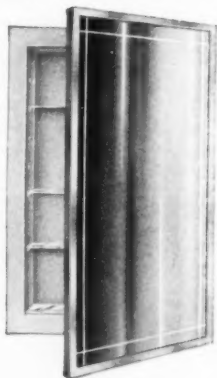
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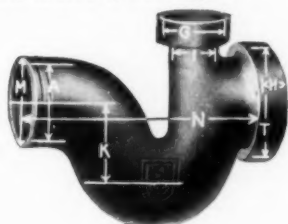


Figure 267
ACID PROOF BELL & SPIGOT RUNNING
TRAP WITH VENT CLEANOUT

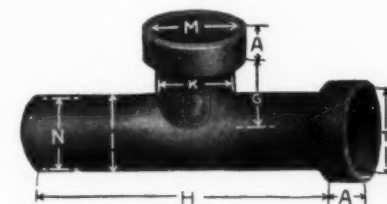


Figure 273
ACID PROOF BELL & SPIGOT TEE

Maurice A. Knight
Akron, Ohio

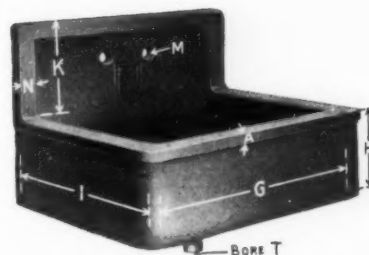


Figure 237
ACID PROOF LABORATORY SINK
WITH BACK

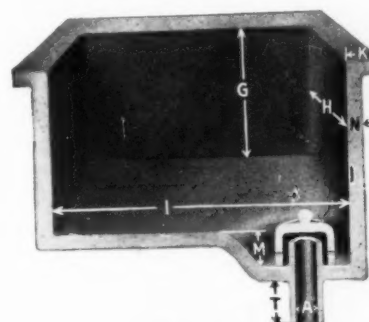


Figure 235
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OUT BACK, SHOWING LUTE TRAP

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Figure 271
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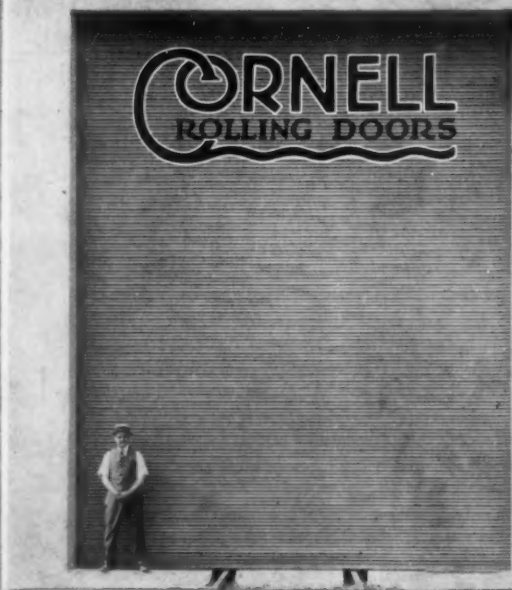
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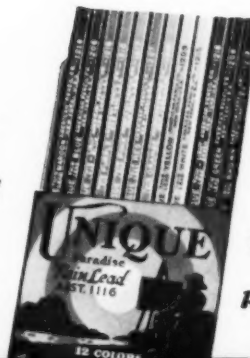
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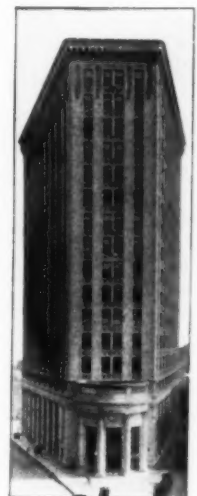
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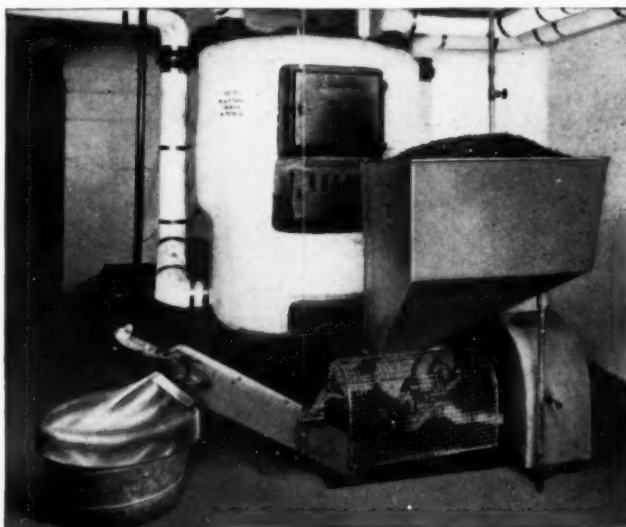
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Manufacturers of Hand Power
Dumb Waiters and Elevators

1542 Montana St., Chicago



FITZGIBBONS STEEL BOILERS "The Boiler you can afford to own"

Steel-assured dependability and durability

Advanced scientific design

Extraordinary economy

Compact, brickless construction

Practically no maintenance expense

Proved by forty years of faithful service

Heating Sizes from 300 to 36,000 sq. ft. Steam Rating

Power Sizes from 40 to 350 H. P.

Complete information, ratings and dimensions upon request

FITZGIBBONS BOILER CO.

INCORPORATED

570 Seventh Ave., New York, N. Y.



The John E. Andrus mausoleum, Kensico Cemetery, New York, built entirely of Extra Fine Grained Blue-White Westerly Granite, from the quarries of the Sullivan Granite Company, Westerly, Rhode Island. Farrington, Gould & Huxford, New York, architects.

EXTRA FINE GRAINED BLUE WHITE WESTERLY GRANITE

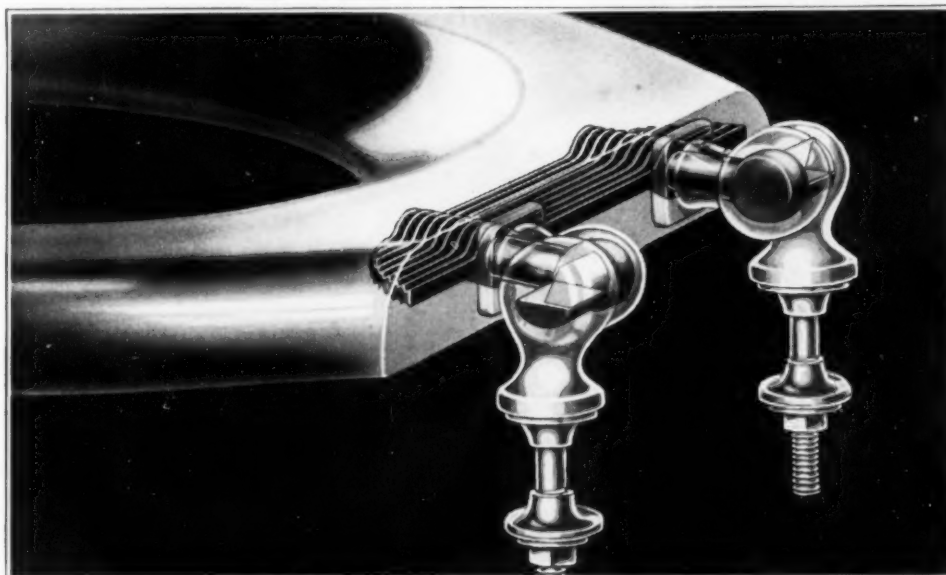
has no equal for mausoleums or other
memorials. Quarried solely by us.
Prompt delivery of any size required.

SULLIVAN GRANITE COMPANY
WESTERLY, RHODE ISLAND

Send for our handsomely illustrated booklet R giving complete information

This New Hinge is *molded* into the seat itself

Whale-bone-ite's supremacy clearly maintained by this new feature



Seat shown is Model 21-968.
Phantom view gives details of
construction.

ON the union between hinge and seat depends the permanence of your seat installation. Realizing that the unsanitary metal hinge with its cleaning problem and loosely connected parts was a weakness in closet seats, the makers of the Whale-bone-ite Seat have perfected a new-type hinge which is actually part of the seat itself.

This new hinge is molded in one operation as an integral part of the Whale-bone-ite Seat. Re-inforced by a metal die-cast, one-piece insert, it is covered with highly-polished Whale-bone-ite. Thus it has the same strength and finish as the Whale-bone-ite Seat itself.

The makers of the Whale-bone-ite Seat offer this newest feature on all models of both closed and open-back seats. Whale-bone-ite is the only seat having the hinge you see pictured here. It is one more reason why you should specify this finest of seats for your building.

WHALE-BONE-ITE TOILET SEAT

THE BRUNSWICK-BALKE-COLLENDER CO., CHICAGO

Albany	Boston	Chicago	Dallas	Detroit	Kansas City	Minneapolis	Philadelphia	San Francisco	Tampa	Ottawa
Atlanta	Buffalo	Cincinnati	Denver	Harrisburg	Los Angeles	New Orleans	Pittsburgh	Seattle	Washington	Toronto
Birmingham	Charlotte	Cleveland	Des Moines	Houston	El Paso	New York	Richmond	St. Louis	Montreal	Havana

For free cross-section of a Whale-bone-ite Seat, address Dept. 204 Seat Division,
The Brunswick-Balke-Collender Co., 623 South Wabash Avenue, Chicago



Tudor City Apartments

East 42nd St., New York

— designed, constructed, financed by and managed by the Fred F. French Companies. Overlook East River! View! Distinction! Rentals!

THE MID-WEST INCINERATOR

(Chute-Fed) was chosen for the Second Unit to relieve the discriminating residents of garbage and refuse—without producing bad odors or noxious gases.

Step-Grate Construction

Complete Combustion

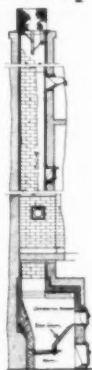
Mid-West Grates — Step - Grate Type — receive material at top—either through a firing door or top opening in furnace. As materials on lower parts of inclined grate surface are consumed, fresh material on the upper sections gravitates into the combustion zone — automatic self-stoking — great saving of labor.

Mid-West Incinerator Corp.

General Offices: 154 E. Erie St., Chicago
New York Offices: 2 W. 45th St., N. Y.

REPRESENTATIVES:

Boston, Mass., Fiske & Co., Inc., 115 Federal St.; Milwaukee, Wis., Goodwin Bldg. Specialty Co., 424 Jefferson St.; Minneapolis, Minn., H. O. Johnson, 648 Builders Exchange; New York, Stanton-Thomson Corp., 2 W. 45th St.; Philadelphia, Pa., W. A. Laub Co., 1700 Walnut St.; Washington, D. C., Arthur B. Gilbert, Insurance Exchange; Buffalo, N. Y., Edwin G. Day & Co., Erie County Bank Bldg.; St. Louis, Mo., A. D. Foster, 3727 Olive St.; Fort Wayne, Ind., C. J. Clark, 809 Spring St.; Ballantyne-Neill Co., 339-341 Elizabeth St., Atlanta, Ga., for North and South Carolina, Georgia, Florida and Alabama; Preston Daniele, Hubbell Bldg., Des Moines, Ia. for the state of Ia.; Kelly-Duluth Co., 6 E. Superior St., Duluth, Minn.; F. C. Sanders, 1701 Race St., Denver, Colo., for the states of Colorado and Wyoming; Kemp and Jackson, Baltimore, Md.



"Chute-Fed"



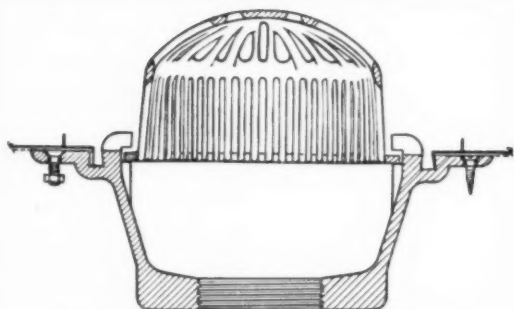
PRESTEEL Stairways Tested for Strength

by Engineers on
Engineering Standards
Stairways for all types of Buildings

Contracts Taken Anywhere
Representatives in all Principal Cities

Guaranteed Without Reservation
We will be glad to forward Catalog
prepaid on request

WOODBRIDGE ORNAMENTAL IRON COMPANY
1515 ALTGELD STREET - CHICAGO, ILLINOIS
Incorporated 1913



Mahon's Cast Iron Roof Sump

Designed for You by Experienced Roofers

Durable cast iron construction—no springs, no bolts, no loose rings. Doubly protected drain, dome locks in place, weathertight connections. Furnished in four sizes tapped for 3, 4, 5 and 6 inch standard wrought iron pipe thread.

Write for complete data

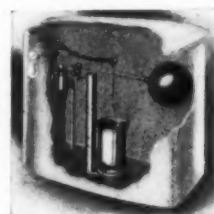
THE R. C. MAHON COMPANY
Detroit, Michigan

MAHON ROOF SUMPS

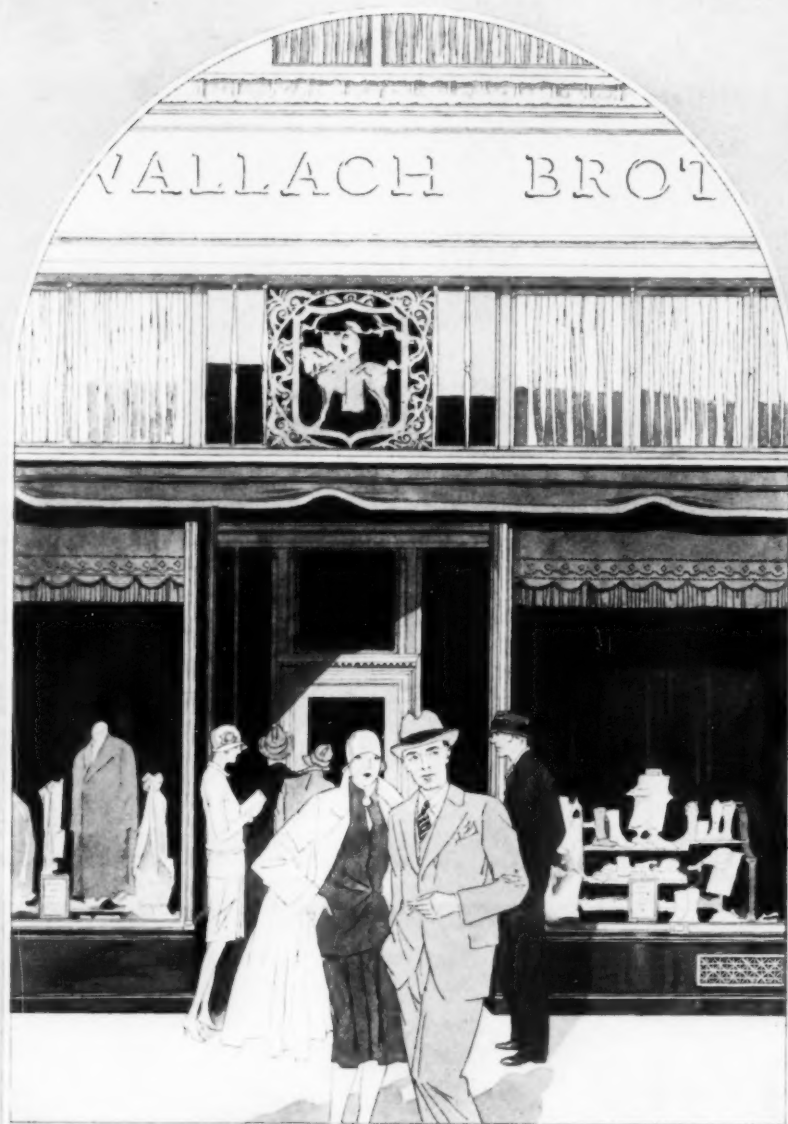
CURTIN

TANK NOISELESS FITTINGS

THE finest installation for homes and apartments where quiet bathrooms are desired.



A. F. CURTIN VALVE CO.
MEDFORD, MASS.

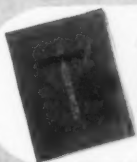


HOLMES & WINSLOW, Architects

Distinctive Store Fronts

With the many new Kawneer creations at his command the architect is permitted greater freedom for the expression of his ideals of beauty. Store fronts—practical from the standpoint of merchandise display—and distinctly original in design are now a reality.

The new Kawneer features are fully described in our new catalog M A1 A-26-b-1, copy of which should be in your files. If not, write for another.



THE
Kawneer
COMPANY

2723 Front St., NILES, MICHIGAN

SEND CATALOG "M"

Name.....

Address.....

City..... State.....

★

The tremendous volume of CARNEY CEMENT used is the result of one primary element—quality. Its money-saving features always have been and always will be secondary!

CARNEY CEMENT

for Brick and Tile Mortar

Specifications:

1 part Carney Cement to 3 or 4 parts sand depending upon quality of sand

THE CARNEY COMPANY
Cement Makers Since 1883

District Sales Offices:
CLEVELAND - CHICAGO - DETROIT
ST. LOUIS - MINNEAPOLIS

★

"There IS a Difference
in Sash Cord"

SAMSON SPOT Sash Cord

TRADE MARK

REG. U. S.
PAT. OFF.

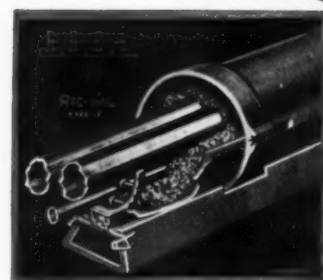
There is a lot of satisfaction for Architect, Builder and Owner in this durable Sash Cord.

It will carry the sash for years to come, running without noise or jumping. It is solid braided cotton, strong, round, smooth and fully stretched. And it is identified for you by the colored spots, our trade mark.

Made by
SAMSON CORDAGE WORKS
88 BROAD STREET BOSTON, MASS.



Insulated by Standard Ric-wil Conduit Filler or Dry-Pac (waterproof) for wet ground conditions—packed around pipes at most efficient density. Usually the most inexpensive type of Ric-wil, especially for a group of pipes.



Conduit that Fits the Job

Ric-wil Engineers, with years of underground construction experience, have solved conduit problems that meet the **test**. Architects who specify Ric-wil conduit can be assured of rugged and lasting strength, complete dryness, and easy installation. You can be sure of this standard product that is alike from year to year. When you recommend Ric-wil you eliminate heating troubles for all time. Full information and estimates promptly furnished upon request.

The Ric-wil Company
1566 Union Trust Bldg., Cleveland, Ohio



This is one of a series of advertisements showing why Rock of Ages is the perfect material for any large memorial form.

Without knot, stain or other imperfection

ROCK OF AGES GRANITE is singularly pure in texture and color. The sculptor's chisel never meets a knot to ruin a delicate bit of carving—nor does moisture or the passage of time bring out discolorations.

Rock of Ages has many times proved itself perfectly adapted to the large memorial or architectural form which commonly includes both broad plain surfaces, and carved ornament.

✂ Inquiries regarding specific problems will receive our immediate and complete attention. Address Dept. B. ✂

ROCK OF AGES

THE DISTINCTIVE BARRE GRANITE

ROCK OF AGES
CORPORATION



BARRE
VERMONT

Why Do They Use ROBRAS 20-20 Radiators?

One User Answers

RHINELANDER REAL ESTATE COMPANY.
31 NASSAU STREET

POST OFFICE BOX 258, CITY HALL
TELEPHONE 4371, RECTOR.
FRANCIS M. VALK, MANAGER

WILLIAM R. STEWART, PRESIDENT
PHILIP RHINELANDER, VICE PRESIDENT
T. J. OAKLEY RHINELANDER, TREASURER
PHILIP RHINELANDER, 2ND, ASST. TREASURER
WM. RHINELANDER STEWART, JR., SECRETARY

NEW YORK

Donald Hoakes
Rome Brass Radiator Corp.
1 East 42nd St.
New York City

April
Eighteenth
Nineteen
Twenty-Eight.

My dear Mr. Hoakes:

Six months ago, when you assured me that your Robras 20-20 concealed radiator would appreciably decrease renting resistance and offset the fairly high rentals we expected from the Rhinelander apartments, I was rather skeptical.

However, time has proven your statements.

The apartments in this building have rented with surprising ease. No small amount of credit for this should go to your, in the wall, out of the way, radiators. Never in my long experience in renting high class apartments have I had a selling point so understood and appreciated by prospective tenants.

Please accept my thanks for bringing this radiator to my attention. I am,

Very sincerely,

Francis M. Valk
Manager.

In the Rhinelander Apartment mentioned above, twenty-seven thousand feet of Robras 20-20 radiation is used.

It was designed by SUGERMAN & BERGER, architects for the Rhinelander Real Estate Company.

The general contractors were the TAYLOR CONSTRUCTION COMPANY.

The Heating System was laid out by JAROS AND BAUM, Heating and Ventilating Engineers, and installed by GEORGE E. GIBSON CO., Heating Contractor.

ROME BRASS RADIATOR CORPORATION

ONE EAST FORTY-SECOND STREET , , , NEW YORK, N. Y.

WITH A BRICK HOUSE *DUBOIS* LENDS *a softening touch ~ ~ ~*

FOR the type of residence shown here, Dubois is especially recommended.

Being a product of Nature itself, it adds a soft, rustic touch that relieves the severity of brick.

Made in France, of straight, live, split chestnut saplings, woven closely together, Dubois is gaining an immense vogue in this country because it is not only highly distinctive in appearance but extremely adaptable to American landscaping schemes.

It is easy to erect and lasts a lifetime. No paint is required. It is moderate in cost.

DUBOIS Woven Wood Fence

Made in France

*Residence of
E. A. Hamilton, Esq.
Garden City, L. I.
W. F. McCulloch,
Architect*



Robert C. Reeves Company, 187 Water Street, New York

Please send, without obligation, your new ALBUM illustrating the many interesting ways Dubois is being used.

Firm _____

Name _____

Address _____

City _____ State _____ A.R. 6 _____

Have You This New Album? We have recently prepared a beautiful album containing photographic studies of actual Dubois installations that cover almost every landscaping problem. The album has received enthusiastic praise from architects everywhere. If you have not obtained a copy, write us, and one will be sent you free.

ROBERT C. REEVES CO.

187 Water Street, New York

CLASSIFIED DIRECTORY OF ADVERTISERS

Alphabetical Index to Advertisers, Page 182

After reviewing advertisements in this issue—consult Sweet's Architectural Catalogue 22nd edition for catalogue and specification information on the products of these manufacturers.

Acid Proof Chemical Stoneware
Knight, Maurice

Anchorage—Masonry
Dovetail Anchor Slot Co.

Architectural Faience
Associated Tile Mfrs.

Architectural Supplies
American Lead Pencil Company
Higgins, Chas. M., & Co.

Artstone
Rackle, George, & Sons Co.

Asbestos—Johns-Manville Corporation

Bag Trucks
Bates Valve Bag Corp.

Basement, Windows—Steel
Detroit Steel Products Co.
Kalman Steel Company
Truscon Steel Company
Youngstown Pressed Steel Co.

Bathroom Accessories
Autoyre Company
Crane Company
Eustis, J. P., Mfg. Company
Hess Warming & Ventilating Co.
Morton Manufacturing Co.

Beads—Corner Metal
Kalman Steel Company
Genfire Steel Company
Truscon Steel Company
Wheeling Corrugating Co.
Youngstown Pressed Steel Co.

Beams, Angles, Channels, Etc.
Carnegie Steel Company

Beds—Concealed
Concealed Bed Corp.

Binding Strips
Blasteel Mfg. Co.

Blackboards
Weber Costello Co.

Boiler and Pipe Covering
Carey, Philip. Company
Johns-Manville Corporation
Ric-Wil Company

Boilers
American Gas Products Co.
American Radiator Co.
Dahlquist Mfg. Co.
Fitzgibbons Boiler Co.
Smith, H. B., Company, The, Inc.
United States Radiator Corp.

Boiler Feed Treatment
Paige & Jones Chemical Co.

Bolts—Door
Corbin, P. & F.

Brass and Bronze Workers
See "Ornamental Metal Workers"

Breakfast Room Furniture
Fain Mfg. Co.

Brick
American Face Brick Association
Fiske & Company, Inc.
Hood, B. Mifflin, Brick Co.

Builders
Stone & Webster, Inc.

Building Paper
Bird & Son, Inc.
Sisalkraft Company

Buildings—Steel
American Bridge Co.
Carnegie Steel Company

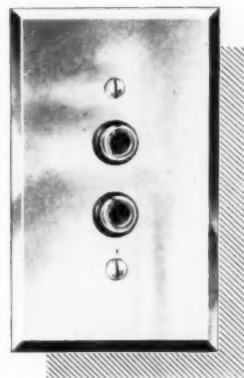
Built-In Units
Fain Mfg. Co.

Butts
Corbin, P. & F.
Stanley Works

Cabinet Work
Hyde-Murphy Co.

Plan the Wiring for Radio in Every Room by the installation of

H&H



H&H

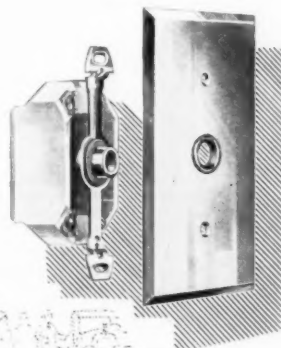
DUPLEX RADIO OUTLETS in Hotels, Hospitals, Clubs etc.

Radio service to every room—already an advertised feature in big hotels—think of it and provide for it by specifying a “radio circuit” in addition to the lighting circuit.

The radio circuit consists of wiring from main receiving sets in the basement, distributing the radio programs to various rooms through a system of Radio Outlets installed in baseboards. Guests “plug in” with loud-speakers or headsets like plugging into the lighting circuit with electric appliances.

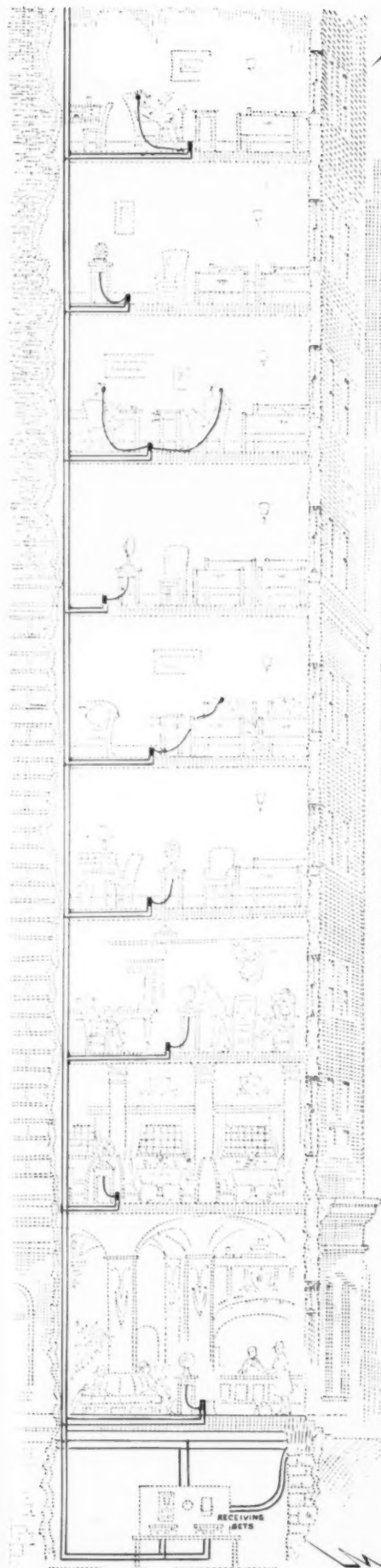
The latest practice, most popular in hotels, is to offer listeners a choice of *two* programs; two main receiving sets in the basement; wires running to *double* receptacles. For this we’ve developed the Duplex Outlet shown above.

The *Single* Radio Outlet at left takes care of installations with but one main receiving set; one program to connect with. It may be used in the home or in apartments for “radio extensions” to different rooms from a central receiving set. Let us send you a handy little folder with suggestions to pass on to clients, for adding “radio circuits” to their electrical conveniences.



Single
Outlet

THE HART & HEGEMAN MFG. CO.
HARTFORD, CONN. MAKERS OF ELECTRIC SWITCHES SINCE 1890



This Architect's book



is an invaluable aid for specifying pure, clean and lowest-cost hot water.

Illustrating the Fourteen Typical Installations of

EXCEL SO WATER HEATERS

OF STANDARD A. I. A. file-size and showing the best practices for connecting Excelso Indirect Water Heaters to heating boilers under fourteen different conditions, this book furnishes information every architect will want.

ASK YOUR SECRETARY to write for this informative book—today, lest she forget.

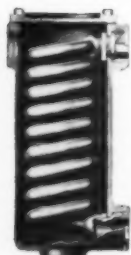
Excelso Products Corporation

DIVISION OF AMERICAN RADIATOR COMPANY

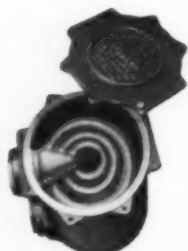
67 Clyde Ave.

Buffalo, N. Y.

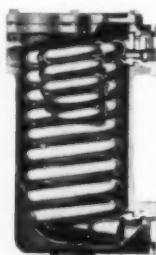
Sold and Installed by All Plumbing and Heating Contractors



Single Coil



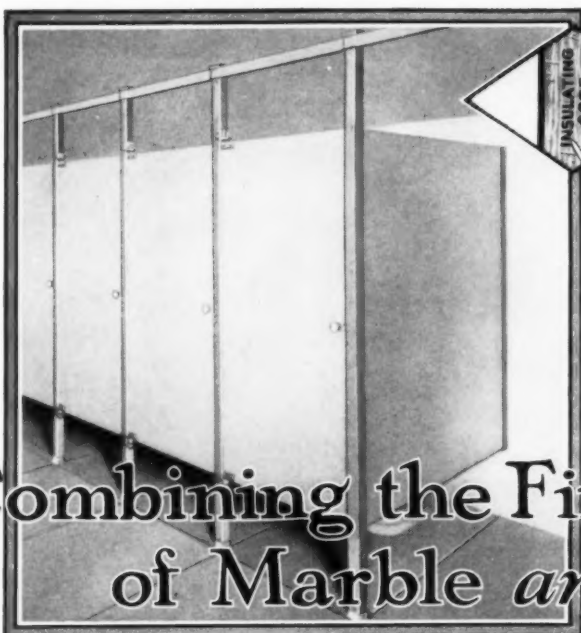
Triple Coil



Double Coil

SIZES FOR ONE FAMILY OR ONE HUNDRED FAMILIES

- Cabinets—Kitchen
 - Coppes Bros. & Zook
 - Janes & Kirtland
 - Wasmuth Endicott Co.
- Cabinets—Medicine
 - Eustis Mfg. Co., J. P.
 - Hess Warming & Ventilating Co.
 - Morton Manufacturing Co.
- Cabinets—Shoe Cleaning
 - Griffin Mfg. Co.
- Cabinets—Radiators
 - Tuttle & Bailey Mfg. Co.
- Caulking & Glazing Compound
 - Arco Company
- Casements
 - Detroit Steel Products Co.
 - International Casement Co.
 - Lupton's, David, Sons Co.
 - Truscon Steel Company
- Cellar Drainer
 - Penberthy Injector Co.
- Cement—Atlas Portland Cement Co.
 - Carney Company, The
 - Kosmos Portland Cement Co.
 - Lawrence Cement Co.
 - Louisville Cement Company
 - Portland Cement Association
 - Sandusky Cement Co.
 - U. S. Gypsum Co.
- Cement White
 - Atlas Portland Cement Co.
 - Sandusky Cement Co.
- Cement Bags—Paper
 - Bates Valve Bag Corp.
- Chain Sash
 - American Chain Co.
 - Detroit Steel Products Co.
 - Smith & Egge Mfg. Company
- Channels
 - Carnegie Steel Co.
 - Genfire Steel Co.
 - Kalman Steel Co.
 - Youngstown Pressed Steel Co.
- Church Memorials
 - American Seating Company
- Clamps—Lock Joint
 - Hyde-Murphy Co.
- Clay Vitrified
 - Clay Products Association
- Coal Doors
 - Kalman Steel Company
 - Youngstown Pressed Steel Co.
- Columns, Porches, Etc.
 - Hartmann-Sanders Co.
 - Union Metal Mfg. Co.
- Concealed Beds
 - Concealed Bed Corp.
- Concrete Accelerator
 - Master Builders Co.
 - Solvay Sales Corp.
- Concrete Construction—Reinforced
 - American Steel & Wire Company
 - Concrete Reinforcing Steel Institute
 - Genfire Steel Company
 - Kalman Steel Company
 - Truscon Steel Company
 - U. S. Gypsum Co.
- Concrete Hardener
 - Master Builders Co.
 - Sonneborn, L., Sons, Incorporated
 - Solvay Sales Corp.
- Concrete Piling
 - See Piling Concrete
- Concrete Surface Treatment
 - Master Builders Co.
 - Solvay Sales Corp.
- Conduit for Underground Heating Pipes
 - Ric-Wil Company
- Cooking Equipment
 - Edison Electric Appliance Co.
- Coping Wall
 - Clay Products Association
- Cork Covering
 - Armstrong Cork & Insulation Co.
- Cork Tile Flooring
 - Armstrong Cork & Insulation Co.
- Corkboard
 - Armstrong Cork & Insulation Co.



Combining the Fine Advantages of Marble *and* Metal

DURING the past few years, there has been an increasingly pronounced demand for a toilet partition finer than the ordinary type of metal toilet partition, and while we were fully aware of this demand, we resisted the temptation to enter the market with an experimental product.

Numerous designs were developed incorporating a great variety of ideas and improvements until finally, after more than two

years, we were ready to announce Marblmetal, a full expression of the finest in toilet partitions.

The result is that builders can now have not only a modern toilet partition, but one which has been perfected in the laboratory of experience and combines all of the fine advantages of marble and metal.

Descriptive literature will be mailed upon request.

THE MILLS COMPANY

903 Wayside Road
CLEVELAND, OHIO

Representatives in All Principal Cities

MARBLMETAL

Toilet Partitions



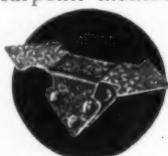
TEMPLE GARDEN
APARTMENTS
BALTIMORE, MD.

A. LOWTHER FORREST
Architect

J. HENRY MILLER, INC.
General Contractor

100,000 SPEARPOINT FLOOR CLIPS

permanently anchor the wood floors in this building to the concrete slabs. The Spearpoint method of anchorage reduced the dead weight 18,000 lbs. per thousand square feet of floor area, with a further saving in time, material and labor. Ask for Circular "A."



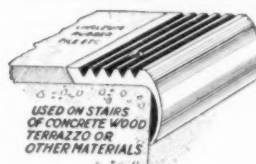
AGENTS IN
PRINCIPAL
CITIES

BLASTEEL MANUFACTURING CO.

Manufacturers also of Ankortite Floor Joiners, Brass Thresholds,
Desk Edgings, Carpet and Linoleum Bindings.

GENERAL OFFICE
KANSAS CITY
MISSOURI

BEAUTIFUL STAIRWAYS Sanitary and Easily Kept Clean



Grooved Design

The beauty of a luxuriant lobby is greatly enriched by attractive tread coverings installed with Blasteel Grooved Brass Nosings on the stairway leading to the first floor, while the Plain Design in either brass or white metal renders a similar service on other flights.

Blasteel Nosings meet the tread covering at an angle, binding it in place and protecting the edge from rolling, chipping, wear or deterioration. Complete descriptive matter, samples and prices gladly furnished.



Plain Design

Covering—Pipe and Boiler

Armstrong Cork & Insulation Co.
Carey, Philip, Company
Johns-Manville Corporation
Ric-Wil Company

Dishwashers

Colt's Patent Fire Arms Mfg. Co.

Door Check—Corbin, P. & F.

Sargent & Company

Door Closers

Norton Door Closer Co.

Door and Window Frames

Andersen Lumber Co.

Doors—Cornell Iron Works, Inc.

Detroit Steel Products Co.
Genfire Steel Company
Hamlin, Irving
International Casement Co.
Hyde-Murphy Co.
Peelle Company, The
Sanymetal Products Co.
Richmond Fireproof Door Co.
Security Fire Door Co.
Thorp Fire Proof Door Company
United Metal Products Co.
Wilson, J. G., Corp.

Drawing Inks

Higgins, Chas. M., & Co.

Dumbwaiters—Matot, D. A., Co.

Sedgwick Machine Works

Electric Refrigerators

Kelvinator Corp.

Electric Switches

Hart & Hegeman Mfg. Co.

Electrical Equipment

Adam, Frank, Electric Co.
Edison Electric Appliance Co., Inc.
General Electric Company
Guth, Edwin F., Co.
Hart & Hegeman Mfg. Co.
Hazard Insulated Wire Works
Holtzer-Cabot Electric Co.
Imperial Electric Co.

Elevator Door Hardware—Wagner Mfg. Co.

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Peelle Company, The
Security Fire Door Co.
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Elevator Inclosures

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Elevators

Matot, D. A., Co.
Otis Elevator Company
Sedgwick Machine Works

Enamels

Arco Company
Berry Brothers, Inc.
Du Pont, E. I., de Nemours & Co., Inc.
Pratt & Lambert, Inc.

Expanded Metal

Consolidated Expanded Metal Cos.
Genfire Steel Company
Kalman Steel Company
Truscon Steel Company
Youngstown Pressed Steel Co.

Fence Post—Steel

American Steel & Wire Co.

Fence Woven Wood

Reeves, Robert C., Co.

Fences

American Steel & Wire Co.
Cyclone Fence Co.
Fiske, J. W., Iron Works

Fire Exit Devices

Vonnegut Hardware Company

Fireproof Doors, Shutters and Windows

Cornell Iron Works, Inc.
Detroit Steel Products Co.
Peelle Company, The
Richmond Fireproof Door Co.
Thorp Fire Proof Door Company
Truscon Steel Company
United Metal Products Co.

Rot Proof

Crack Proof

Enduring

Composition Capital with sharp lines and fine architectural detail.

Stopped flutes and apophyge at top of shaft.

Union Metal Columns are protected against weather conditions by being galvanized with lead and zinc spelter, both inside and outside.

Corinthian flute with flat top (sharp Doric flute provided on Doric designs).

Vertical joints of all columns are double lock seamed with seam rolled on inside so that all outside surfaces are smooth and clean.

Entasis (modified taper giving an outcurving or bulging effect).

Section of fluting showing beautiful, clean-cut lines due to Union-Metal steel die construction.

Stopped flutes and apophyge at bottom of shaft.

Double roll Attic base with bottom square member.

Cast-iron top ring.

Galvanized steel cylinder carries weight from top ring to pressed steel shaft.

Cast-iron bottom ring. This construction relieves composition capital of all weight.

All columns are provided with priming coat of best grade reinforced red lead before leaving factory. Any color of finishing coat can be applied after erection.

8 inch, 10 inch, 12 inch, 14 inch, diameter columns made of one-ply 22-gauge galvanized steel. Large columns, 16-inch to 42-inch diameter, made from two-ply 22-gauge laminated steel construction. Special construction from 42 inch to 60 inch diameter.

Details of stopped flute outward curvature or apophyge and lower end of shaft where it fits over cast-iron base flange.

Cast-iron base, smooth and clean.

THE UNION METAL MFG. CO.
GENERAL OFFICES AND FACTORY, CANTON, O.
Branch Offices—New York, Chicago, Philadelphia,
Cleveland, Pittsburgh, St. Louis, Los Angeles, San
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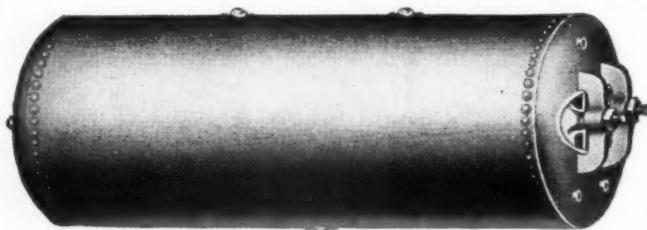
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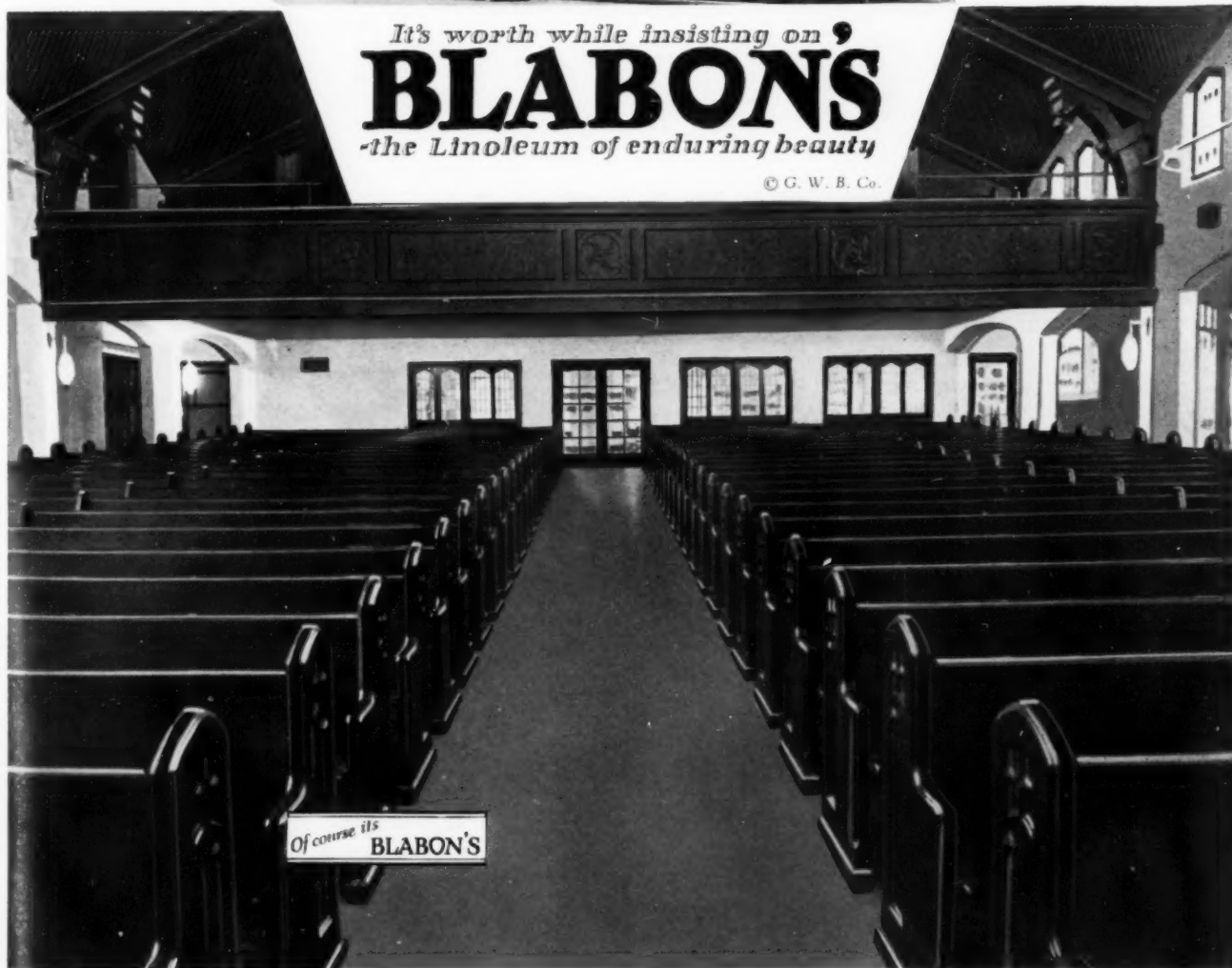
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Sec. B, Page 1749

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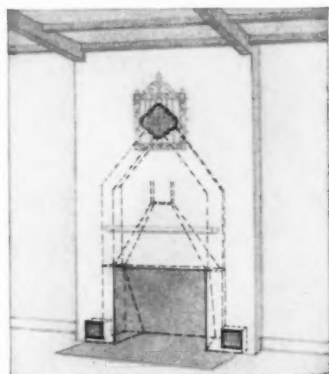
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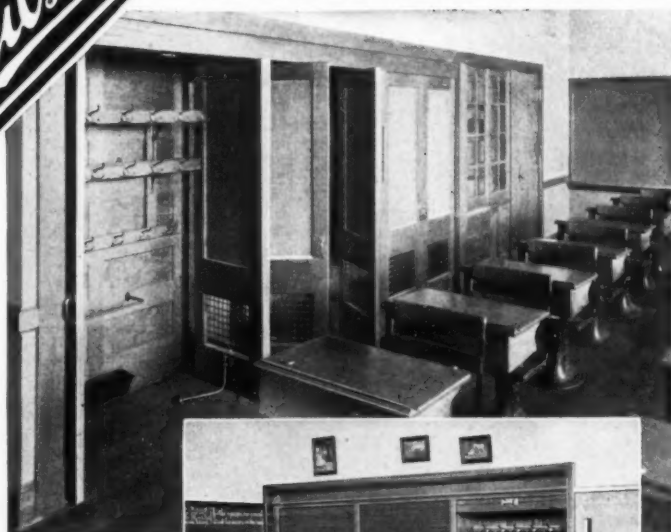
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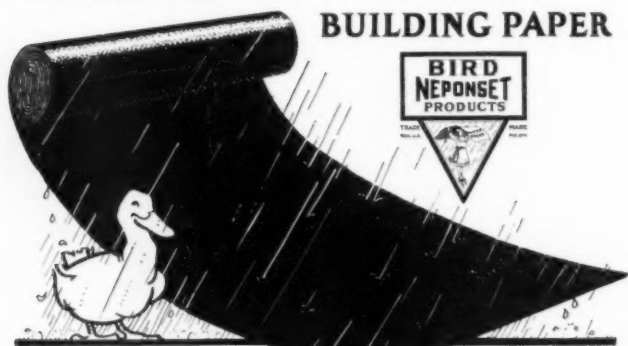
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The Architectural Record, June, 1928

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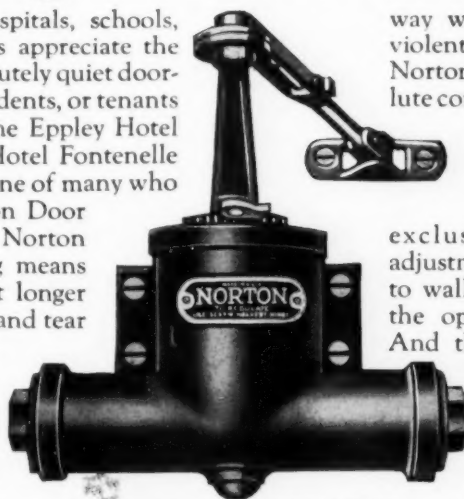
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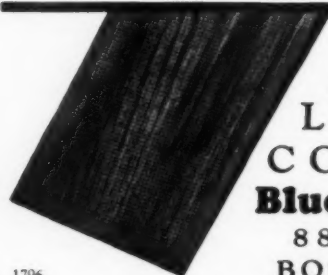
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